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The Heart of Economic Reform

*China's Banking Reform and
State Enterprise Restructuring*

Daochi Tong

RAND Graduate School

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China's Banking Reform and State Enterprise Restructuring

Daochi Tong

RGSD-149

RAND Graduate School

This document was prepared as a dissertation in March 1999 in partial fulfillment of the requirements of the doctoral degree in policy analysis at the RAND Graduate School of Policy Studies. The faculty committee that supervised and approved the dissertation consisted of Charles Wolf, Jr. (Chair), Kung Chia Yeh, and Charles A. Goldman. Lawrence J. Lau of Stanford University was the outside reader for the dissertation.

PREFACE

This study is submitted as a dissertation to the RAND Graduate School in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Policy Analysis. The research was partially funded by the RAND Graduate School. The Pudong Institute of Development in Shanghai also provided support for my trip to China in July 1997 for interviews on Chinese financial institutions, and the Institute of Financial Studies of the People's Bank of China provided the data on China's financial institutions.

The study examines the roles of the financial sector in financing China's development, and the relationship between financial sector reform, state-owned enterprises restructuring, and the reform of social welfare system in China. The study's findings should be of interest to policy makers, policy analysts, scholars and executives of banking and financial institutions accessing the financial sector reform in China.

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SUMMARY

Significant market-oriented reforms carried out in China have brought tremendous changes in the real sector. However, the reform of the financial sector has lagged that of the real sector. The weakness of the financial sector and the alarm of the Asian financial crisis have caught the attention of the leadership and in 1997-98, the government identified financial reform as the top priority in the reform agenda. This study examines how financial resources are misallocated under the current financial system in China, and the impact of such misallocation of capital on the strength of the banking sector, and on China's long-term economic growth. It also explores the reasons why financial reform that is needed to improve the efficiency in allocation of capital has been delayed and lagged real sector reform, by measuring and analyzing the costs of social services that the state-owned enterprises (SOEs) provided. In particular, it provides estimates of social welfare costs to SOEs and their effects on the profitability of the state sector, and draws implications on the sequence of social welfare reform, the state enterprise restructuring, and the reform of the banking system.

MAJOR FINDINGS FROM THE ANALYSIS

Financial Development and Economic Development

The theories and empirical studies suggest that the financial sector plays important roles in economic development, both as a mobilizer of savings and as a channel of investment. A sound financial sector is crucial to sustain economic growth. Theories of financial development and empirical research findings tend to agree that well-functioning financial systems are able to stimulate and sustain economic growth because they help pool financial savings and allocate them to highest return use. However, in China, the financial sector remains underdeveloped and does not perform these functions well.

Changing Sources of Funds for Investment

Economic reform has led to widespread decentralization and rapid growth of the non-state sector which in turn led to the transfer of income from government to enterprises and households. The government has not been effective in collecting taxes from non-state enterprises; as a result, government revenue has been declining relative to output. The share of savings by government in gross domestic savings had decreased from 42.8 percent in 1979 to only 4.1 percent in 1991. *The government has also lost its key position as the main saver in the economy and the direct provider of funds for investment in the state sector.*

By contrast, household savings have had extraordinary growth and become the main external sources of domestic financing. Household savings as a share in gross domestic savings had increased from 23.6 percent in 1979 to 70.5 percent in 1991. Household savings as a share in GDP also rose from 8 percent to 27 percent during the same period. Rural and urban household savings deposits in financial institutions rose from 6 percent of GDP in 1978 to 56 percent of GDP in 1996. Rapid economic growth and growth of personal income is the major reason for the increase in household savings. Other reasons include unavailability of alternative forms of financial assets and lack of consumer credit, which lead to forced savings, as well as the rapidly aging population and demographic transition which may have forced people to save for future spending.

Foreign investment, especially foreign direct investment, played an important role in financing China's development since 1990s. However, there has been a large difference between the amount of contracted and actual foreign investment. The fact that less than half of the contracted foreign investment was actually invested in China reflects that foreign investors are still cautious to pour large amount of investment in initially due to the lack of confidence on China's market. It may also be because barriers to foreign investment are high in China.

The Role of the Financial Sector in Financing Investment

The development of the financial sector in China lagged far behind that of other sectors of the economy and the roles they played in mobilizing savings and channeling them to efficient investment have been weak. First, the financial sector is dominated by banking institutions; capital markets have developed slowly. Second, the banking sector is dominated by the state banks, which are controlled by the government and primarily serve the inefficient state sector. Third, the rapidly developing informal non-banking financial institutions, including rural and urban credit cooperatives, have financed the growth of rural and urban non-state enterprises, but the size of these financial institutions are small compared with the state banks and cannot meet the financial needs of the non-state sector.

State banks, especially the four state commercial banks dominate the banking sector in China. They are the major absorbers of household and business savings, but they are controlled by the government and their funds are mostly invested in state-owned enterprises. State banks accounted for 80 percent of total credit funds, and received three-quarters of household savings deposits, but 90 percent of state bank loans went to the state sector. Establishment of policy banks relieved a partial burden of state commercial banks in policy lending, but state commercial banks are still required to finance loss-making SOEs.

Non-state commercial banks are small compared with state commercial banks. Funds of these banks are mostly from SOEs and local governments, and their loans also mainly go to fi-

nance SOEs and local investment. Foreign banks channel foreign funds from their affiliated banks to investment in foreign-invested enterprises in China. The share of foreign banks in the banking system is still very small and they play a limited role in capital formation in foreign-invested enterprises, which are mainly financed by foreign direct investment.

The development of non-banking financial institutions (NBFIs) is one of the major characteristics of financial development in China since economic reform. The rural and urban credit cooperatives have developed rapidly and have played significant roles in mobilizing rural and urban household and business savings and channeling them to investment in non-state enterprises. The rural credit cooperatives are the main sources of financing for township and village enterprises, while the urban credit cooperatives are the key providers of funds for urban private and individual enterprises. Trust and investment corporations have facilitated flow of funds among commercial banks and enterprises, and have been an important source for regional development.

However, NBFIs are small in scale compared with the banking system which is dominated by state commercial banks. Their total assets accounted for only one-fifth of the total assets of all financial institutions. These institutions, especially rural and urban credit cooperatives, are informal in nature and lack modern banking skills. As a result, they have not been able to meet the growing demand for financial services from the rural and urban non-state enterprises.

Capital markets in China have been slow in development and play a much smaller role in financing investments than the banking institutions. Funds raised through stock and bond markets comprised less than a quarter of total funds channeled through the financial sector. Market capitalization is only 14 percent of GDP, which is much lower than financially developed economies and many other emerging market economies. Stock markets are also segmented, as separate markets are developed in Shanghai and Shenzhen and separate shares are issued for domestic and foreign investors. Furthermore, capital markets are controlled by the central government and primarily serve as financing vehicles for state-owned enterprises. The government decides and selects firms for new listings in the stock markets. Bond markets are dominated by government securities and primarily serve the financial need of government and development of strategic sectors. Corporate bond issues are very small. Thus, capital markets have played a limited role in financing China's development.

The dominance of the state banks has hindered the development of the capital markets. Government has maintained the control on financial resources by controlling the state banks. Rapid development of capital markets may cause a large shift of funds from the banking sector and thus threaten the government control. As a result, the government is reluctant to see a rapid growth of the capital markets. Lack of a well-developed legal system and clearly-defined property rights also hindered the development of the capital markets in China.

Inefficiency in Allocations of Capital

As a result of the underdevelopment of the financial sector, financial resources have been inefficiently allocated and utilized in China. *The inefficiency in investment can first be demonstrated by the mismatch between input of financial resources and output produced. State-owned enterprises received 80 percent of total loans extended by the financial sector, but produced less than 30 percent of industrial output, created one-third of non-agriculture employment, and generated one-quarter of exports.* By contrast, the non-state sector, including township and village enterprises, and private, individual and foreign enterprises, produced more than 70 percent of industrial output, three quarters of exports, and employed two-thirds of non-agriculture workers, but they only used 20 percent of loans from financial institutions. *A second indicator is higher capital-output ratio in SOEs than in non-state enterprises. The capital-to-output ratio in the state sector is almost twice as high as that in the non-state sector, and in 37 out of 39 industrial sectors SOEs are found to be less capital-efficient than non-state enterprises.* A third indicator is that two-thirds of China's growth has been from capital accumulation, while productivity growth from improvement in efficiency made much less contribution in growth.

Investment Efficiency, Social Welfare Costs, and Profitability of SOEs

The government has heavily relied on SOEs to provide urban employment, housing, education, health care, and pension funds to urban populations: SOEs provide 40 percent of jobs in urban area, 57 percent of pension funds, and three quarters of urban housing. Medical institutions that belongs to SOEs serves one-fifth of China's total population. Such a reliance has forced the government to continue directing bank loans to loss-making SOEs, thus delaying the financial and state enterprise reform..

The social service burden that SOEs carry has significantly increased their labor costs.. Health care, pension, and welfare spending amount to a third of total wage payments of SOEs, while housing subsidies alone account for 36 percent of the wage bill. Education expenditure comprised about 2 percent of wages. Altogether, expenditure on health care, pension, housing, education, and other welfare and subsidies by state owned enterprises amounted to 332.5 billion yuan in 1996, comprised of 72 percent of total wage payments of SOEs, or 42 percent of their total labor costs.

The cost of financing those social activities was equal to the total explicit losses that the loss-making SOEs as a whole has incurred, and three quarters of total losses if the implicit financial subsidies from the banking system are included. Separation of social functions from SOEs therefore would significantly improve the profitability of the state enterprise sector.

SOEs directly providing social services to their employees is also inefficient because it has divested resources that would have been used in producing commercial output, and it led to in-

efficient use of services and shortage of supply. *Services provided by facilities run by SOEs are more than twice as costly as services provided by alternative means, such as private entities or local governments.*

The lack of an alternative social welfare system has also affected the pace of SOE reform and the reform of the financial system. Loss-making SOEs are not allowed to be divested as they support a large number of urban workers with housing and other benefits. Banks are not able to extend loans to efficient non-state enterprises as much as they should have if these loan decisions were made under a commercial criteria, because they are controlled by the government to finance SOEs' social service provisions.

POLICY IMPLICATIONS

Sustaining high level of household savings

The change in the structure of savings has important implications for capital formation in China. As household savings have become the principle sources of investment, *sustaining high rate of savings will be crucial to achieve high growth in the economy.* To maintain high level of household savings, the role of banks in mobilizing saving becomes increasingly important. Banks need to provide attractive rate of returns to savers. Liberalization of interest rates, including decontrol of deposit rates, therefore, should be on the financial reform agenda for the near and medium term.

Foreign direct investment will continue to be important for China's growth in the next century. China need to further open its market and lower the barriers for foreign investment in order to shorten the lag between contracted and foreign investment.

Improving efficiency in allocation of capital

Efficiency in allocation and use of capital in China needs to be improved in order to sustaining future economic growth. First, financial resources need to be reallocated from the state sector to non-state sectors which offer higher rate of returns to capital. Second, improving efficiency in allocation of capital requires significant reform of the financial sector.

Access to financial resources by non-state firms should be improved significantly, and resources should be shifted from the state sector to the non-state sector. Reallocating financial resources from SOEs to non-state enterprises will be able to create more employment opportunities, generate more exports, and sustain higher growth rates. Transferring labor from SOEs to the non-state sector may also be a longer term solution to unemployment problems than investing in public infrastructure projects.

Significant reform in the financial sector is necessary to achieve efficient allocation of capital. The four state commercial banks need to be transformed from passive financing agents of government-identified projects to proactive financial intermediates serving a creditworthy client base and ensuring the efficient use of depositors' funds. It is therefore crucial to completely separate the policy lending functions from the state commercial banks and transfer them to policy banks.

Non-bank financial institutions, especially the rural and urban cooperatives, have played a major role in financing the growth of the TVEs and urban private sector. However, they need to be formalized and upgraded to urban and rural cooperative banks to serve a larger client base.

The size of the capital markets need to be further expanded. Expanding capital markets will be able to increase the proportion of direct financing, thus reduce reliance of the corporate sector on the banking system and lower their debt-to-equity ratio. Capital markets also provide an effective way of monitoring firms' operation by share-holders while avoiding the cozy relationship between banks and enterprises.

Expansion of capital market requires reduction of government control on their development. The efficiency, stability, and transparency of capital markets need to be improved. Firms in all regions should have equal access to capital markets. Firms in all sectors, including state and non-state sectors, and strategic and non-strategic sectors, should have equal rights in issuing shares or bonds.

Reforming the social welfare system

Social welfare reform is a prerequisite for SOE reform and financial sector reform and should precede these reforms. If SOEs can be relieved of the responsibility of providing social services and supporting redundant personnel, many of the loss-making SOEs will be profitable and they will not need subsidies from the government and state banks, and the task of reforming SOEs would be less formidable as it appears, which in turn will facilitate the reform of the state banking system. Thus, the sequence of the reform should be as follows: social welfare reform, followed by state enterprises restructuring, and then the transformation of the state banking system.

As SOEs' provision of social services is not as efficient as alternative means, such as local governments or other organizations, social service functions should be separated from SOEs and passed on to municipal or local governments or non-government entities. Separating responsibilities for these social functions from SOEs is critical because their continuance, especially housing provided by enterprises, which is among the largest component of the SOEs' social costs, hinders the mobility of workers and managers. As long as social benefits remain linked to jobs, an agile labor market cannot develop, SOEs cannot lay off their redundant

personnel, and nonviable SOEs cannot be liquidated. Thus, state banks have to continue injecting soft loans to cover SOEs' losses.

The key to the success of the housing reform is the financing of private home ownership. The banking system's preoccupation with providing cheap credit to SOEs has left the banks with little time to develop the mortgage lending skills and little credit funds for mortgage loans. It requires significant training of bank personnel and redirection of state bank loans from SOEs to mortgages but this will not happen in a short period of time.

A critical issue in reform of the pension system is the funding for pension. Loss-making SOEs have little funds to contribute to the plan, yet they often have much heavier burdens of supporting retirees than other enterprises. It is critical that cross-firm municipal pooling of pension obligations and payroll taxes earmarked for pensions continue to gain importance.¹

Divestitures of hospitals and other health care facilities of SOEs require setting up a health insurance scheme for employees to cover their health expenditures. Reducing excess employees and laying off redundant personnel in SOEs require expansion of unemployment insurance. Expanding the program, however, requires substantial increase in funding. This requires increase in individual contributions through payroll taxes, and government funds, as well as other means.

¹World Bank (1997).

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GLOSSARY OF ABBREVIATIONS

ABC	Agricultural Bank of China
BIS	Bank for International Settlements
BOC	Bank of China
CCB	China Construction Bank
CITIC	China International Trust and Investment Corporations
FIEs	Foreign Invested Enterprises
ICBC	Industrial and Commercial Bank of China
IMF	International Monetary Fund
IOEs	Individually-Owned Enterprises
PBC	People's Bank of China
PIEs	Private and Individual Enterprises
PLA	People's Liberalization Army
RCCs	Rural Credit Cooperatives
SCBs	State Commercial Banks
SOEs	State-Owned Enterprises
TICs	Trust and Investment Corporations
TVEs	Township and Village Enterprises
UCCs	Urban Credit Cooperatives

1. INTRODUCTION

Since 1978 market oriented reforms have created remarkable changes in China. In many ways, China is moving away from a centrally-planned economy to a more market-oriented economy. This process is best demonstrated by the relative decline of the state sector and the emergence and rapid rise of the non-state sector in the Chinese economy. The share of state-owned enterprises (SOEs) in industrial production has declined from two-thirds in 1985 to only one-third in 1995. Correspondingly, the non-state sector, including the township and village enterprises (TVEs), private and individual enterprises (PIEs), and foreign invested enterprises (FIEs) has been growing rapidly, comprising an increasingly greater share of the economy. Similarly, the share of SOEs in total exports declined from almost 90 percent in 1986 to less than 30 percent in 1994.² Thus, it is clear that the state sector is no longer the dominant player in the Chinese economy, though it is still a key player.

Along with the growth of the non-state sector, the role of central planning in the allocation of physical resources, such as raw materials, has been significantly reduced. The physical plan is increasingly irrelevant to economic performance. Comparing the Eighth Five-Year Plan (1990-95) (FYP) with actual output, it is clear that there was very little connection between the plan set in 1990 and what actually happened--many of the targets were fulfilled within three years, as growth in GDP, trade, and foreign investment was much faster than planned. Although the authority to approve large-scale projects remains in the hands of governments, the traditional role of central planners to allocate raw materials and equipment no longer exists, significantly reducing the influence of the FYP.³

Another sign of increasing marketization and liberalization in the real sector production of goods and services is the declining proportion of goods and services whose prices are controlled by the government. Currently, prices of more than 90 percent of agricultural and consumer goods, and 80 percent of producer goods are determined by the market.⁴

Compared with the real sector, the transition of the financial sector from central planning to a market-based system has significantly lagged. This lag can be demonstrated in three ways: while the state sector's share in output has declined to less than one-third and no longer is a dominant player in the real economy, the financial sector is still dominated by the state banks. State banks accounted for 85 percent of total financial assets, 80 percent of total loans and three quar-

²See Chapter 9.

³Lardy, 1996, p.9.

⁴See Appendix 1.

ters of total deposits in the financial system.⁵ Non-state banks have entered the sector but they are very small in comparison to the state banks. Non-bank financial institutions, including the rural and urban credit cooperatives and trust and investment corporations, have developed alongside the state banks in responding to the growing demand for finance of non-state sectors and local economic growth. Although acquiring an increasing share, however, the non-state financial institutions continue to play a limited role in the financial system.

Development of the capital market lagged even further behind. Stock markets did not appear in China until 1990, a decade after the reform in the real sector started. Stock market development, measured as the share of market capitalization in GDP, is only 14 percent and still at a very low level compared with developed countries.⁶ In addition, markets are segmented: separate markets have developed in Shanghai and Shenzhen, and domestic and foreign shares are not tradable. While goods markets are well developed and prices of 80 to 90 percent of agricultural goods, producer and consumer goods are determined by market forces, in the financial sector, the prices of financial products, such as interest rates, are still highly regulated by government. As will be shown in Chapter Four, rates on 80 percent of loans by financial institutions are fixed by the government. Rates are often set below the market level and interest margins are too low to insure the low cost of financing to SOEs and state priority sectors.

A third signal of lag in financial reform has been the dominant role of the credit plan in monetary policy, while the role of the physical plan in the real sector has been reduced substantially. The credit plan facilitates the government's control of financial resources.

The mismatch between financial and real sector development has had a profound effect on the economy. First, it has led to misallocation and inefficient use of financial resources. Under the current financial system, financial resources are concentrated in the state sector. State banks' resources have been and are still being poured into SOEs at the direction of central and local governments, but investments in the state sector are often not as productive as those in the non-state sector. Had the flow of financial resources been guided by market forces, China would have had stronger growth with more efficient use of inputs. Second, the lag in financial reform has also affected the quality of financial assets and development of modern financial skills. State banks accumulated a substantial amount of non-performing loans, and their capital base has been declining and are currently at about 3 percent, well below the international standard. Under the system of government-directed finance, state banks have developed few skills in evaluating the credit-worthiness of borrowers. Third, the practice of relying on direct instruments of monetary policy to conduct macroeconomic management has become obsolete and increasingly ineffective in an

⁵See chapter 3, Table 3.1.

⁶See Table 8.3.

economy in which the physical plan is essentially irrelevant to real sector development. As a result, the Chinese economy has suffered from the "bubble and burst circle," as demonstrated by the fluctuations of real output and inflation.⁷

China's financial development is to some extent similar to that of East Asian countries. Except for Hong Kong, Taiwan, and Singapore, almost all the East Asian countries have long maintained policies of financial restriction. Despite tremendous growth in the real sector, the financial sectors of these countries remain highly regulated and underdeveloped, and the reform and liberalization of these financial sectors has lagged behind that of the real sector. Recent financial turmoil in the region has demonstrated the dangers of lag or delay in financial reform.

Indeed, the Asian financial crisis highlights the importance of financial reform in China. However, financial reform is closely linked to SOE reform and government institutional reform, and efforts to reform the financial sector cannot proceed independently. The most important challenges to financial reform in China are to overcome the legacy of policy lending and state control, and to build an efficient financial system that operates under market principles and on commercial terms.

Several studies have been conducted on the financial sector and monetary policy in China. Most studies, however, focused on either describing the structure of the financial sector, or monetary policy issues, especially credit control. Studies have been conducted, for example, on how the local and provincial governments have tried to circumvent the Chinese government's policy on credit control to expand local production and investment, and described how this process has contributed to bubble-bust cycles of the Chinese economy. Other studies have focused on the financial sector alone. Few studies, however, have systematically analyzed the relationship between the financial and real sectors, and the role of the financial sector in real sector development, especially in resource allocation.

Li (1994) is the only study that focuses on the relationship between the financial sector and economic development in China. It used the financial development and financial repression theories to examine China's performance in the first decade of reform. An empirical study was done to test financial repression theory in China which confirmed that China was financially repressed, i.e., government control on interest rates had been detrimental to its economic development.

Yi (1994) studied money, banking, and the financial market in China during the period of 1984 to 1993. The focus of this study is on monetization of the economy and demand for money in China, as well as the relations between money supply and inflation. Although it touched on

⁷See Appendix 2.

the issues of financial reform, including reforms on non-bank financial institutions and financial markets, it is descriptive rather than analytical.

Dipchand et al (1994) produced the first comprehensive study of the financial sector in China. It provides the essential structure of the Chinese financial system as it evolved by the early 1990s, including the development of the central bank, the state commercial banks, non-bank financial institutions, securities markets and foreign banks.

Huang (1996) investigated the decentralization and liberalization of the banking system in China and how this decentralization, without adequate control, has led to destabilization of the macroeconomy. His main argument is that liberalization of the banking system should not be attempted as long as the industrial system is not subject to proper financial discipline.

Mehran et al (1996) of the IMF is a study of monetary and exchange systems in China. It provided an overview of the reform in various parts of the financial sector, including the development of the central banks and commercial bank laws, development of money and capital markets, payment and exchange systems, as well as instruments of monetary policy.

Girardin (1997) of the OECD studied China's financial sector reform and monetary policy. In the study, he examined the structure of the financial institutions, including banks and non-banking financial institutions, and their recent development, especially the development of the non-bank financial institutions. However, the focus of this study has been on the mechanism and sources of excess credit creation and financial chaos in the early 1990s and the difficulties of the central bank in controlling credit. The latest data on the financial sector were available only up to 1994.

Lardy(1998) of Brookings Institution is the most recent study on China's banking reform. It assessed China's gradual approach to economic reform and argues that although this approach, has its advantages over the big bang approach, the costs of postponing the state-owned enterprises reform are very high: it resulted in a nearly insolvent state banking system. Financial sector reform is urgent as high non-performing loans in the state banks may trigger a banking crisis in China. The study focuses on the weakness of the banking system and measures to create a modern financial system in China.

The contributions of this dissertation to the current literature on China's financial sector reform are as follows. First, to examine the process of allocation of financial resources in the Chinese economy and the role the financial sector played in this process. In particular, it will examine the importance of the financial sector in mobilizing savings and channeling savings to investment in the changing macroeconomic environment, and demonstrate that the current financial system in China has led to the significant misallocation of financial resources in the economy. It will study the changes in the sources of credit funds after reform, direction of loans

for each type of financial institutions or markets, including the banking system, non-bank financial institutions and capital markets, and financial resource allocation among the state vs. non-state sectors in the economy and investment efficiency in these sectors, Second, it will explain why financial sector reform is difficult by examining and measuring the social welfare burdens of the SOEs, including housing, medical care, pensions, and child education. It will develop improved measures of costs of social welfare functions to SOEs, and assess the profitability of SOEs if these social responsibilities are to be released and assumed by local governments or non-government organizations. Third, it will tackle the issues of what needs to be done about the Chinese financial sector and the SOE sector, and offer recommendations on how to reform them in light of two preceding analyses. The data sources used in this dissertation will be unique and the most up-to-date: it will use the most recent data (up to 1996) provided by the People's Bank of China (published in Chinese), combined with data and information that the author collected from interviews conducted in July 1997 with people in banks and stock exchanges and financial research institutions in Shanghai.

The dissertation will proceed as follows. Chapter 2 will review theories of financial development, and the role of the financial sector in economic development. Chapter 3 will describe the Chinese financial reform process since 1978, and the structure of the current financial system. A heuristic model of financing investment in China will be set up in Chapter 4, along with the propositions to be tested in the following chapters. Chapter 5 will describe and analyze the changing structure of source of funds for investment. Chapters 6 to 8 will analyze the role of various types of financial intermediaries in channeling savings to investment. Chapter 9 will analyze and compare the efficiency of these different channels of financing investment and their contribution to the growth of output in the real sector. Chapter 10 will explore some of the reasons why financial sector reform has not been able to proceed as fast as the real sector reform, by measuring the social welfare spending that the banks are financing through the state-owned enterprises. Chapter 11 will discuss the programs of the reform--the social welfare reform, the state enterprise reform, and the financial sector reform--that need to be carried out to improve the efficiency in allocation of capital. Chapter 12 draw conclusions from the analysis in the previous chapters.

2. THEORIES OF FINANCIAL DEVELOPMENT AND ECONOMIC DEVELOPMENT

This chapter will review the theories of financial development and economic development, and the role of the financial sector in economic growth. In particular, it will answer the following questions: is the financial sector important to economic growth, and what role the financial sector plays in financing investment in the real sector.

Financial intermediaries include financial institutions and capital markets. Financial institutions can further be divided into formal and informal banking institutions. Formal banking institutions constitute mainly commercial banks, while informal banking institutions include credit unions and other credit associations. Capital markets include bond and equity markets.

ROLES OF THE FINANCIAL SECTOR IN ECONOMIC DEVELOPMENT

The primary functions of the financial intermediaries are mobilizing savings and channeling savings to investment. A well-developed and functioning financial sector can mobilize investable funds and channel them to productive use, thereby increasing output and promoting economic growth.

Financial intermediaries fulfill their function by taking deposits from savers and lending funds to investors. In theory, savers can provide their funds directly to investors. In practice, however, at least three obstacles exist for such direct investments, which the financial intermediaries are created to overcome⁸. First, funds from an individual creditor are usually small, but banks can provide pooling of funds to create large funds for investment projects; second, individual savings tend to be short term, while banks can provide long-term funds for investors by taking short-term deposits from a large number of individuals and still stand ready to meet the demand for withdrawals on the part of some depositors. Third, banks can diversify the risks faced by savers by lending to a broad range of projects; fourth, banks as professional lenders are better able than individuals to identify the most promising projects and thus more successful in allocating funds to the highest rate of return.

Mobilization of Savings

This is the process of persuading savers to put their savings in forms of financial assets so that they can be channeled to other users of funds. In a financially underdeveloped society, savers tend to have little inclination to place funds in financial assets, even if they have access to them. The wealth may be held in cash, or invested in non-productive assets such as gold. The

⁸Lardy (1998), p. 59.

objective of mobilization of savings therefore is to provide incentives for savers to use their savings productively. These incentives include interests, dividends, and profits provided by various channels. In financially backward societies this may be done largely by informal mechanisms such as credit unions. At a more advanced state of financial development, mobilization may be achieved through formal financial intermediaries. In the most financially sophisticated societies, mobilization may be achieved directly, by investing in bonds, stocks, or other capital market instruments.

Intermediation

Intermediation is probably the most basic and important function of the financial sector. Essentially, financial intermediaries act as middlemen between those who have funds but do not want to invest by themselves and those who do not have funds but want to make the investment. They provide indirect means of transferring funds from savers to borrowers or investors.

The theory of financial intermediation rests on the relationship between savers and investors. In a completely underdeveloped financial sector there will be no transfer of savings from savers to investors. Investors who want to make investments have to rely on their own savings. Effectively this may mean that many who want to make physical investments cannot do so, while many who could invest do not wish to, thus investable resources are not utilized efficiently.

Table 2.1
Financial Intermediation and Stages of Development

Stage of Financial Development	Financial Intermediaries
Completely underdeveloped	No intermediaries, investment comes from investors' own savings and retained earnings
Financially backward	Informal financial institutions such as credit unions
Early stage of development	Banking institutions dominated by state banks, often controlled by the government to finance government priority projects or sectors
Financially more developed	Commercial banking system supplemented by bond and stock markets
Financially most developed	Fully developed banking system (including commercial and investment banking) and capital markets (including debt, equity, and money markets)

Source: Gills et al. (1992); Lardy (1998a); McKinnon (1973, 1993); Stiglitz (1993).

The Roles of Government vs. Financial Intermediaries in Financing Investment

There are alternative ways to fulfill some of the functions of the financial sector: savings can be mobilized through government forced savings by taxation; savings can be channeled to

investment directly by the government through budget appropriation. However, the key difference between government channel and financial intermediaries is that a well- developed financial sector usually leads to more efficient allocation of resources. Under an efficient financial system, capital is often channeled into highest return use; while investment made by budget appropriations are often based on criteria other than rate of return, such as priorities in industrial development and important substitution. In a financially mature economy, the financial sector and the agents in the sector, such as banks and the stock market, will ensure that financial resources will be used most efficiently. A process of financial deepening suggests that the well-developed financial sector is better able to channel the resources to productive investment and increase output than the government.

Roles that financial intermediaries actually play in mobilizing savings and channeling them to investment differ in different economic systems. In a centrally planned economy, the government mobilizes all the necessary finances for investment. The savings of individuals are insignificant and the private corporate sector is non-existent. The role of financial institutions in channeling savings to investment is replaced by government planning agencies, and the growth of financial institutions is thus seriously restricted. Under such circumstances the financial sector would play a negligible role in economic development and would be underdeveloped compared with the financial sector in market economies.⁹

By contrast, in a market economy, the government plays a passive and minimal role in mobilizing and allocating financial resources. Thus, these tasks fall to the financial sector, which assumes a much greater importance in mobilizing private savings and channeling them to investors. In the absence of such financial intermediaries, therefore, the level of investments and therefore economic growth is likely to be stunted.

FINANCIAL DEVELOPMENT AND ECONOMIC DEVELOPMENT

Financial Development: Definition and Measurements

Financial development, according to Drake (1980),¹⁰ is defined as "the expansion and elaboration over time of the financial structure (the institutions, instruments, and activities)." To better understand what it means, we will discuss first different measures of financial development. Although none of them can capture the whole picture of the level of financial development, together they should be able to help characterize the degree of financial development.¹¹

⁹McKinnon (1993).

¹⁰Drake (1980), p. 27.

¹¹Some of the indicators are developed based on the World Bank (1995) and King and Levine (1993).

The first measure, probably the mostly commonly used, is *financial depth*, which measures the size of the formal financial sector relative to economic activity. This indicator is defined as the ratio of liquid liabilities of the financial system to GDP. Liquid liabilities equal currency held outside the banking system plus demand and interest-bearing liabilities of banks and non-bank financial intermediaries, which equals to M3. Since financial depth measures the degree to which the formal financial sector mobilizes domestic savings, a larger number in financial depth should reflect greater financial development.

However, financial depth may not be an accurate measure of the level of financial development. First, in financially highly developed countries such as the United States, a large portion of financial assets are held in the form of stocks and securities, which are not included in liquid assets. This is why we see in Table 2.2 the United States actually has a much lower level of financial development than Japan if measured in financial depth. Second, in countries with a rapid growth of domestic credit and money creation, increase in financial depth may not necessarily mean financial deepening. This is the case in China, where financial depth was already much larger than that of the United States in 1997. Third, financial depth does not measure where and how the financial system allocates funds. In countries where the central bank dominates the banking system and primarily serves the government in financing government deficits or state-owned enterprises, financial depth may not actually reflect the level of commercial banking and financial development.

The second indicator--*credit to the private sector*--is designed to measure the direction of credit in the financial system. It is equal to the proportion of credit issued to the private sector in total credit issued to both public and private sectors. The assumption behind this measure is that financial sector interaction with the private sector are more indicative of the provision of productivity-enhancing financial services to more efficient allocation of resources than financial sector interactions with the public sector. We can see from Table 2.2. that countries in a higher level of financial and economic development, such as United States and Japan, share of private sector in banking credit are much larger than those in countries in a lower level of financial development, such as China and India.

In countries where commercial banks are controlled by the government and credit is directed by government to public and private enterprises in targeted industries or sectors, commercial banking and credit to the private sector may not actually reflect the level of financial development. Two more indicators can be used in these cases: *the proportion of policy loans* (i.e., loans extended at the direction of government on preferential terms) in total loans outstanding, and *ownership of commercial banks*. Proportion of policy loans indicates the proportion of loans that are extended based on policy rather than commercial criteria. Commercial bank ownership is an

indicator of the banking sector's degree of independence from the government and the extent of competition in the credit markets. Public banks are the usual tool for providing financing to state sector and priority sectors at non-market terms. In the United States and Japan, almost all commercial banks are all privately owned, while public banks dominate the banking system in India and China.

Table 2.2.
Indicators of Financial Development

Country	Financial Depth ¹ (1997)	Credit to Private Sector (1997) ²	State-ownership of Commercial Banks (1994) ³	Stock Market Capitalization (1996) ⁴
US	59.4	83.8	0	115.6
Japan	210.4	85.6	0	67.2
Korea	48.3	98.9	13	28.6
Indonesia	44.5	95.1	48	40.3
China	120.7	18.6	82	14.0
India	48.9	49.9	87	34.4

Note: ¹The ratio of M3 (or M2 when data for M3 is not available) over GDP (in percentage).

²Percentage share of credit to the private sector in total domestic credit ; ³Percentage share of state-owned banks' assets in total assets of all financial institutions; ⁴Stock market capitalization as a share in GDP (in percentage).

Source: IMF (1998); IFC (1997); Goldstein and Turner (1996), World Bank (1998).

Banking development, however, does not tell the whole story of financial development. Besides banks, there are financial markets, and non-bank financial institutions in the financial sector. The level of stock market development can be measured as the *ratio of market capitalization to GDP*. The larger the ratio, the more wealth are held in shares, and the higher the level of stock market development. As shown in Table 2.2., among the six countries which represent different levels of economic development, the United States and Japan are not surprisingly the two countries with the most sophisticated capital markets, while China and Korea have the least developed stock markets.

Financial Development and Economic Development: Theory and Evidence

There has been discussions on economic literature since early in the century on the relationship between financial sector development and economic development. The focal points of discussion are whether the financial sector is important or even relevant to real sector development, and whether the financial sector should lead the real sector development, or vice versa. In the theories regarding the importance of the financial system for economic growth, Joseph Schumpeter (1912) contends that well-functioning banks spur technological innovation by

identifying and funding those entrepreneurs with the best chances of successfully implementing innovative products and production process.

In the realm of development economics, the so-called "neo-liberal" theories of development emerged in the early 1960s, which ascribe considerable importance to the financial system in economic development. Among the leading writers on this subject were Gurley and Shaw (1960) and Goldsmith (1969). This school maintains that the lack of a developed financial system restricts economic growth, and government policy should therefore be directed towards encouraging the growth of the financial system. The neo-liberal theories of development view the financial system as a means to an end, the end being economic development. Financial development is important and leads to economic development.

Perhaps the most important part of the neo-liberal theories of financial development is the so-called theory of financial repression, represented by Ronald McKinnon and Edward Shaw. In 1973, Ronald McKinnon published his influential book "Money and Capital in Economic Development" in which he presented the theory of financial repression.¹² The central theme of his theory is that the financial sector plays a leading role in economic development. In the same year, Edward Shaw (1973) proposed a similar model and emphasized the role of financial deepening in economic development. Together their theory of financial development was called the McKinnon-Shaw model. This model focuses on the distortions in repressed financial sectors in developing countries and how these distortions affect economic growth in the real sector. In their theory, financial sectors in developing countries are given a degree of importance in economic development much greater than accorded by most other theories of development.

The phenomenon of the underdevelopment of the financial sector is called "financial repression" by McKinnon or "shallow finance" by Shaw. A repressed or underdeveloped financial system is often characterized by the following features: 1) the banking system dominates the financial sector, and capital markets are underdeveloped and segmented; 2) the formal banking sector is often controlled by the government, serves state sector or priority sectors defined by the government, and the access to the credit of the rest of economy is limited; and 3) interest rates are often controlled by the government and set below the market levels.¹³

In many cases, the underdevelopment of financial sectors in developing countries is a result of the legacy of central planning and state-led development. In these countries, the state often plays a significant role in allocation of financial resources by controlling the financial system. Governments tend to think that they perform better than markets to channel investment to sectors of priorities, or the market may not be functioning well. While government intervention per-

¹² McKinnon (1973).

¹³ McKinnon (1973).

forms better in real sector development in some developing countries, the interventionist approach is less successful in promoting financial development. Under government pressure, banks lend to state-owned enterprises or priority sectors at below-market interest rates, and interest margins are too small to cover the banks' costs. Many of the government-directed loans have low repayment rates, which lead to a high volume of non-performing loans and low profitability. Interest rate controls have discouraged savers from holding domestic financial assets, thus retarding growth of financial institutions. As a result of this legacy of state intervention, financial sectors in developing countries are often underdeveloped and lag behind other sectors in the economy.

Lack of development in the financial sector in developing countries leads to the misuse of factors of production and the inefficient allocation of resources. In these countries, financial resources are often channeled through formal banking institutions, which dominate the financial system, to inefficient state sectors and priority sectors. Private sectors and small business, which are often more efficient than the state sector, are hardly able to obtain credit from the banking system. Because stock and bond markets are often non-existent or primitive, it is difficult for firms in these sectors to raise funds directly from the public. They have to rely on informal financial institutions such as cooperatives, and retained earnings for resources of investment. Financial repression hinders economic growth in the way that the financial sector could not channel savings to the most productive investment, thus leading to inefficient use of financial resources.

Many empirical studies have examined the relationship between financial and economic development. Early studies, such as Goldsmith (1969), used the value of financial intermediary assets divided by GNP to measure the level of financial development and found that rapid economic growth was often accompanied by rapid financial development. More recent empirical studies of financial development and economic growth include King and Levine (1993a). Their study covers 80 countries over the period between 1960-1989 and finds that there are strong positive relationships between the level of banking development and long-run economic growth, capital accumulation, and productivity.¹⁴ A study by Levine and Zervous (1996) also shows that stock market development is a good predictor of long-term economic growth. It is consistent with the theoretical view that a greater ability to trade ownership of an economy's productive technologies facilitates efficient resource allocation, physical capital formation, and faster economic growth.

¹⁴In this study, several indicators of banking and capital market development are constructed and used in regression. Those indicators are described in earlier discussion of this section.

Economic history also provides some conclusive evidence of the positive impact of finance on economic growth. Kitchen (1986) reviewed the process of economic development in Europe in the nineteenth century and found that development of the financial sector contributed substantially to economic development in much of Europe in the nineteenth century.

In conclusion, theories of financial development and historical and empirical studies suggest that the financial sector plays an important role in economic development, both as a mobilizer of investable funds, and as channels of investment. Financial development is an essential ingredient to economic growth and should lead economic growth. An underdeveloped financial system may lead to inefficient allocation of resources and retard the growth of the real economy.

In the following chapters, we will discuss the role of China's financial system in mobilizing funds for investment, and allocation of capital. We will start with an overview of the financial sector reform in China, followed by a heuristic model on the relationship between the financial and the real sector, which will guide the remaining chapters on the roles of the financial sector: mobilizing savings and channeling savings to investment.

3. EVOLUTION OF CHINA'S FINANCIAL SYSTEM

Financial sector reform in China has focused on the reform and development of banking and non-banking financial institutions,¹⁵ though capital market development has lagged behind. Initial reform of the financial sector has been characterized by the establishment of the two-tier banking system, with the establishment of the central bank and specialized banks. But a major development occurred in the non-banking sector--the emergence of the non-banking financial institutions (NBFIs), including rural and urban credit cooperatives, and trust and investment corporations. Commercialization of state banks, opening the financial sector for foreign competition, and development of financial markets have only taken place to a limited degree.

Reforms in the financial sector can be divided into four phases.¹⁶ The first phase, from 1978 to 1984, witnessed the re-establishment of the banking system in early years of reform. Limited reform was introduced during that period. The second phase of reform, from 1984 to 1988, was marked by the establishment of the central bank, the state specialized banks, and development of non-banking financial institutions. The third phase (1988-91) is a rectification period, and witnessed the interruption of the liberalization and government recentralizing control of the financial sector. The fourth phase, from 1992 to the present, was a period of deepening financial reform, during which new non-state commercial banks were established, policy lending banks have been introduced to pave the way for the commercialization of state banks, and the legal framework of financial institutions was improved.

FINANCIAL SECTOR REFORM: AN OVERVIEW

The Role of Banks and Banking Before Economic Reform

The financial system before reform was characterized by the all-inclusive mono-bank system established in 1950, based on the Soviet Gosbank system. The Chinese financial system was originally designed to serve the planning process rather than to perform the functions of a traditional financial system. Prior to 1978, the People's Bank of China (PBC) served as both a central bank and a commercial bank, controlling about 93 percent of the total financial assets of the country and handling most financial transactions in the economy.¹⁷ The function of the banking

¹⁵Non-banking financial institutions in China refer financial institutions other than the banks, including the rural and urban credit cooperatives, trust and investment companies, and finance, insurance, and leasing companies. For more detailed descriptions, see chapter 6.

¹⁶Mehran *et al* (1996), p. 10.

¹⁷Yi (1994), p. 19.

system was confined to facilitating the financing of the economic plan. The PBC acted mainly as cashiers, with its functions confined to issue currency and credit, and carrying out the settlements of state-owned enterprises transactions.

Before the reform, liquidity in the financial system consisted of two components: cash and bank transfers, which were not mutually convertible. Generally, most transactions in the consumer goods market were conducted primarily in cash, whereas most transactions in the producer goods markets were required to be cleared by bank transfers. The monetary authority used the so-called "cash plan" to control the currency flow and "credit plan" to control the bank transfer flow. As a result, money was divided into two blocks, separated by administrative barriers. While a large proportion of transactions among firms in market economies are also settled by bank transfers, the use of transfers in a central planned economy for corporate transactions was mandatory.

Under such a system, the money supply target was subordinated to the implementation of the output targets in the physical plan. Since most fixed capital investment projects were financed by budget appropriations, the primary objective of the credit plan was to provide working capital to industries and commerce. The volume of total credit was determined by the government's plans for enterprises production, and the amount of cash injected into the economy was based on the level of wage payments by enterprises, which was also dictated by the central authorities.

In summary, the financial system before reform was a mono-bank system which was the agency of central planning authorities. The issue of currency and credit was determined by the cabinet--the State Council --and the People's Bank was not independent, rather, it was only a government agency under the Ministry of Finance and its primary function was to finance the physical plan. The role of the financial system in mobilizing savings was very limited, because the primary source of savings was government and state-owned enterprises. The role of financial intermediation in resource allocation was also limited, because most investments were determined and financed by the government budget appropriations, rather than through the banking system. Except for the banking system, there were no non-bank financial institutions and financial markets, and bank deposits were the only financial assets.

Early Years of Reform: Structural Changes in the Banking System (1978-84)

In the early years of reform, efforts were focused on the rural areas and in the real sector, such as adoption of the "household responsibility system" and price reform, and financial sector reform was limited to structural changes in the monobank system. In 1978, the People's Bank of China (PBC) was formally established as China's Central Bank, and separated from the Ministry

of Finance. In addition, three specialized banks were restored or set up to handle loans to specific sectors. The Bank of China (BOC) was restored to handle transactions related to foreign trade and investment, while the People's Construction Bank of China (PCBC) was set up primarily to serve the construction sector and fixed asset investment. The Agriculture Bank of China (ABC) was established to take over the PBC's rural banking business.

This period also witnessed the start of the development of non-banking financial institutions (NBFIs). Successful reform in the rural areas and the proliferation of rural industries dramatically increased the demand for financial services from rural residents. Thus, a network of rural credit cooperatives was set up under the supervision of the Agriculture Bank of China (ABC) to provide small-scale rural banking services to rural residents and township and village enterprises. Concomitantly, another type of NBFI, namely the trust and investment corporations (TICs), began to appear. The first TIC, the China International Trust and Investment Corporation (CITIC) was established in 1979 to raise funds from foreign sources to finance domestic projects. CITIC has been the primary source for most international bond borrowing made by China during the 1980s.

This period also experienced important changes in the sources of both savings and investment. On the savings side, the decentralization of financial resources into the hands of households led to an explosion in savings deposits. On the investment side, bank loans replaced the state budget appropriations as the main source of investment finance. Following a directive of the State Council in 1979, the main source of investment funds was shifted gradually from state budget to bank loans. Both the PBC and the specialized banks were authorized to grant medium-term to long-term loans to state enterprises. As a result, the composition of funds allocated to state-owned industrial enterprises changed rapidly from budget appropriations in 1978 (70 percent) to state bank loans in 1982 (80 percent).¹⁸

The changes in the structure of savings and sources of investments highlight the importance of financial intermediaries in resource allocation. However, despite the structural changes described above, the banking system still served the limited purpose of financing the physical plan. The People's Bank still assumed the functions of both a central bank and a commercial bank as it continued to provide working capital loans to state-owned enterprises. Loans were directed to state-owned enterprises under the credit plan, and neither the project's profitability nor the borrower's repayment ability was taken into consideration in granting loans. Furthermore, bank monitoring of state owned enterprises was almost non-existent.

¹⁸Mehran (1996), p. 11.

Starting Financial Reform: Development of Banking and Non-Banking Institutions (1984-88)

The second phase, from 1984 through 1988, was the real start of financial-sector reform, though this represented a significant lag with respect to reforms in other sectors of the economy. The most significant change was the establishment of a two-tier banking system similar to that in market economies. In 1983, the People's Bank of China was formally established as the country's central bank by removing its commercial banking activities. A fourth specialized bank, the Industrial and Commercial Bank of China (ICBC) was formed to take over the functions of financing industrial and commercial enterprises formerly assumed by the PBC. Thus, the transition from the mono-bank system to a two-tier banking system was completed and China became the first socialist country to have a full-fledged two-tier banking system, comprised of a central bank--the PBC, and four state-owned specialized banks--the ABC, the BOC, the ICBC, and the PCBC.

There were also significant changes in investment channels. Budgetary funds for investment in state-owned enterprises were further cut and replaced by bank lending, and SOEs were encouraged to borrow from state banks to finance projects instead of relying on state budgets as in the past. As a result, the government found it increasingly difficult to keep control of the mobilization of savings and investments.

The financial sector diversified further after 1984. Following the establishment of the Industrial and Commercial Bank, 1,200 urban credit cooperatives were set up to serve urban individual and collectively-owned enterprises. In addition, new non-state commercial banks were established, including the Bank of Communications (BOCOM) and CITIC Industrial Bank, a wholly-owned subsidiary of the CITIC. These two universal banks were permitted to compete with state specialized banks in all forms of business.

Competition among the state specialized banks increased during this period, as they were allowed to conduct business outside their specialized areas--for example, the Agriculture Bank of China was allowed to set up branches in urban areas, taking deposits from urban residents and making industrial loans. The banking sector also started to permit the entry of foreign institutions, with a small number of foreign banks allowed to set up branches in Special Economic Zones (SEZs). However, their business scope was often limited to trade finance, and they were not permitted to conduct *renminbi*, or domestic currency business.

A major innovation during this period was the development of non-banking financial institutions--in particular the proliferation of trust and investment corporations (TICs). Starting in 1986, hundreds of TICs were set up by state specialized banks and provincial governments initially to circumvent credit quotas or finance local investment, but many of them had been increas-

ingly involved in commercial banking business, taking household deposits and granting working capital loans to provincial and local industries. As a result, the proliferation of TICs increased competition in the financial sector, but it also led to the over-extension of credit and resulted in rising inflation.

Financial Stabilization and Development of Capital Markets (1988-91)

The pace of financial sector reform slowed down during 1988-91 because of the stabilization program to control inflation. The government increased administrative control over the economy and considerable centralization took place. The role of government-directed credit regained significance. Government also increased control on the non-bank sector, the main source of inflation. The TICs went through a reorganization and the PBC increased supervision and control over their lending. Many TICs were merged and closed and the number of TICs was significantly reduced.

Despite these stabilization measures, the financial sector introduced limited reform, including the establishment of financial markets. The Shanghai Stock Exchange was officially opened at the end of 1990, and the Shenzhen Stock Exchange was significantly reorganized in 1991.

Deepening Financial Reform (1992-present)

The year 1992 marked the new era of economic reform, with the famous "southern tour" of Deng Xiaoping. The economy started to boom and the flow of foreign direct investment to China increased substantially. The period also witnessed an expansion of the banking sector and the deepening of financial reform.

A new wave of financial reforms started in 1993, when inflation pressure increased as a result of booming investment. After realizing that measures to control inflation would not be effective without a modern financial system, the central leadership decided to embark on a new program in financial reform in 1993, led by vice-premier Zhu Rongji. The reform program consisted of four major components: 1) separating policy lending from commercial lending by setting up policy banks; 2) deregulating the banking sector and establishing new banks; 3) improving the legal framework of the financial system; and 4) developing financial markets.

Three policy banks were established in 1994, designated to be the main vehicles for policy-based lending in the future. These three policy banks are the State Development Bank, the Agricultural Development Bank, and the Export-Import Bank of China. The establishment of these policy lending banks was intended to pave the way to a further commercialization of state-specialized banks.

In addition, the banking sector started to deregulate and lower barriers to entry. As a result, new non-state commercial banks were established. These banks included nationwide commercial banks, regional banks, savings banks, and private banks. Some of these banks, especially the regional banks in fastest-growing areas, such as Guangdong, Shenzhen, and Shanghai, are quickly gaining importance. The first private bank in China, the Minsheng Bank, was set up in 1996 by the All-China Federation of Industry and Commerce, an association of private enterprises. More foreign banks and financial institutions entered China's market and some of them were permitted to conduct domestic currency business.

Another dimension of financial reform in this period was the improvement of legal framework for a market-based financial system. Several important laws regarding operations of financial institutions were promulgated. In March 1995, the central bank law, the "Law on People's Bank of China" was passed by the National People's Congress. It defined the functions and legal status of the People's Bank of China as the central bank. Under this law, the PBC gained more autonomy and saw its role focused on maintaining monetary stability and the stability of the financial system. Subsequently, "The Law on Commercial Banks" was promulgated in May 1995, aiming to transform state commercial banks into true commercial banks. The passage of these laws marked a further step in building a strong, comprehensive, and relatively independent banking system in China.

Financial markets were further developed and market-based monetary instruments were increasingly used during this period. This included further expansion of stock exchanges in Shanghai and Shenzhen, development of a secondary market for government securities, and development of a money market--the inter-bank market. In addition, the central bank increasingly employed interest rate adjustments and reserve requirements to manage liquidity in the financial system. From November 1993 to the end of 1996, the PBC raised lending rates four times and reduced them twice. In addition, preferential lending rates to 13 sectors were eliminated in January 1995 in an effort to rationalize the structure of interest rates. The authorities also unified the inter-bank lending rates in January 1996.¹⁹

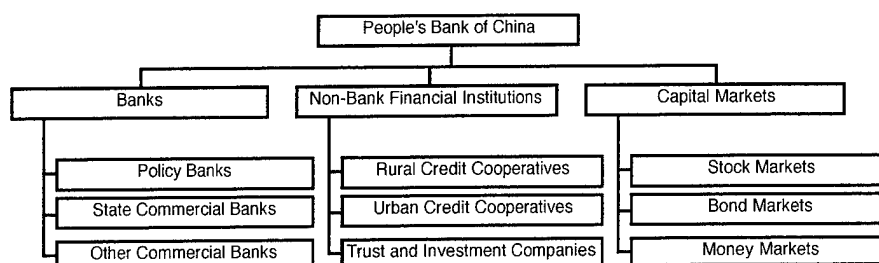
PRESENT CHARACTERISTICS OF CHINA'S FINANCIAL SYSTEM

As a result of the different phases of the reform, the financial system is now comprised of three components: the banking sector, then non-banking sector, and the financial markets. The main component, banking sector, is made up of the central bank, the four state commercial banks, three policy banks, and other commercial banks. The second component, non-bank financial insti-

¹⁹ Girardin (1997), p. 103.

tutions, includes the rural and urban credit cooperatives,²⁰ and trust and investment corporations. The third components include stock and bond markets, as well as other financial markets. The present structure of the financial system is shown in Figure 3.1.

Figure 3.1 Structure of Financial Sector in China



After 18 years of reform, however, the state banks still dominate the financial sector. In 1996, the state banks, including the central bank, the four state commercial banks, and three policy banks controlled 85 percent total assets, granted 80 percent of total loans, and took three quarters of total deposits of all financial institutions in China, as shown in Table 3.1.

Table 3.1

Distribution of Assets, Deposits, and Loans by Types of Financial Institutions, 1996 (In Percent)

Type of Financial Institution	Assets	Loans	Deposits
Banks	84.6	80.7	76.5
State Banks	82.1	77.5	72.3
Other Banks	2.5	3.2	4.2
Non-banks	15.4	19.3	23.5
Urban Credit Cooperatives	3.2	4.0	5.8
Rural Credit Cooperatives	8.2	10.4	12.8
Trust and Finance Companies	3.0	3.9	4.9
Total	100 (7,697.1)	100	100
(Billion Yuan)		(6,115.3)	(6,857.1)

Note: Data on state banks include the central bank.

Source: Author's calculation based on data from PBC (1997a), p. 465.

The dominance of the banking sector in the financial system, and government control of the banking sector are often characteristics of developing countries. As Table 3.2 shows, the banking sector in Indonesia accounted for 91 percent of total assets of the financial institutions,

²⁰ Urban Credit Cooperatives in some large cities were upgraded to bank status in 1996 and their names were changed to Urban Cooperative Banks, correspondingly.

and state banks accounted for 48 percent of total assets in 1994. In Mexico, the banking sector and state-owned banks comprised 87 percent and 28 percent, respectively, of total assets of all the financial institutions in Mexico in 1994.

Table 3.2
Structure of the Financial Sector: International Comparison (1994)

Country	Bank share in total assets (%)	Share of state-owned banks (%) in total assets
China*	85	82
Taiwan	80	57
Singapore	71	0
Korea	38	13
Indonesia	91	48
Thailand	75	7
Mexico	87	28
United States	23	0
Japan	79	0
Germany	77	50

Note: Banks' share in total assets of banks plus non-bank financial institutions. Data for China are data of 1996. Data on the share of state banks in Germany are not strictly comparable.

Source: PBC (1997a), Goldstein and Turner (1996)

Despite the significant strides made in reforming the banking sector, banks in China--in particular the four state commercial banks--cannot be characterized as modern, efficient banking institutions. Although three policy banks were set up to assume policy lending, the four state commercial banks have not yet been able to operate on truly commercial terms. For example, the policy banks did not take over the stock of policy loans of the state commercial banks, and state commercial banks are still controlled by the government and required to finance the state-owned enterprises. Due to dominance of policy lending, the state commercial banks have low asset quality and require significant restructuring and recapitalization. State commercial banks have also failed to adopt modern management techniques such as asset-to-liability management, loan risk assessment, and loan monitoring. Non-state commercial banks are small compared with the state commercial banks, and only play a minor role in the banking system.

The non-banks, which include mainly the Rural Credit Cooperatives (RCCs), the Urban Credit Cooperatives (UCCs), and Trust and Investment Corporations (TICs), emerged and developed rapidly as a result of financial reform and growth of the non-state sector. The non-banking financial institutions (NBFIs)--especially rural and urban cooperatives --mainly mobilize savings from rural and urban households and finance small and medium sized non-state enterprises. The activities of the non-state financial institutions have increasingly threatened the monopoly of the

state banking system, but they compete with state banks only in a limited way in the collection of household savings. Indeed, they absorbed less than one-quarter of total deposits of the financial system, as shown in Table 3.1.

The stock markets provide new types of financial assets other than bank deposits for household savings. The stock markets in Shanghai and Shenzhen have developed rapidly since their establishment in 1990 and 1991. However, they are still small in size and offer very limited competition to state banks and other financial institutions in attracting household savings. In 1996, the total market capitalization of the Shanghai and Shenzhen markets combined was 14 percent of GDP. In the same year, total assets of financial institutions was 113 percent of GDP, more than five times the size of the stock market.²¹

Beginning with the next chapter, we will discuss the role of all three components: the banking system, non-banking financial institutions, and capital market of the financial sector in mobilizing savings and channeling savings to investments. A heuristic model of investment flow will be set up in the next chapter.

²¹ See Chapter 9.

4. FINANCIAL INSTITUTIONS AND INVESTMENT IN CHINA: A HEURISTIC MODEL

As we have mentioned in the introduction, the main objective of the dissertation is to analyze how financial resources are allocated under the current financial system, and how such allocation has affected economic growth and development. The purpose of this chapter is to set up a model of financing investment in China and present propositions that will be tested in subsequent chapters. This model provides a skeletal diagram of the flow of funds from savers to borrowers and to output, as shown in Figure 4.1. It is to help understand the links from savings to investment and then to output, and roles of the financial sector in this process.

This model consists of four components: sources of funds for investment, channels of investment, destinations of investment, and output. The arrows in the diagram represent the links among the sub-components of each part, and the direction of flow. These four parts will be discussed in more detail in this chapter, with equations describing their links.

SOURCE OF FUNDS FOR INVESTMENT

$$\text{FUNDS} = H + G + E + F \quad (1)^{22}$$

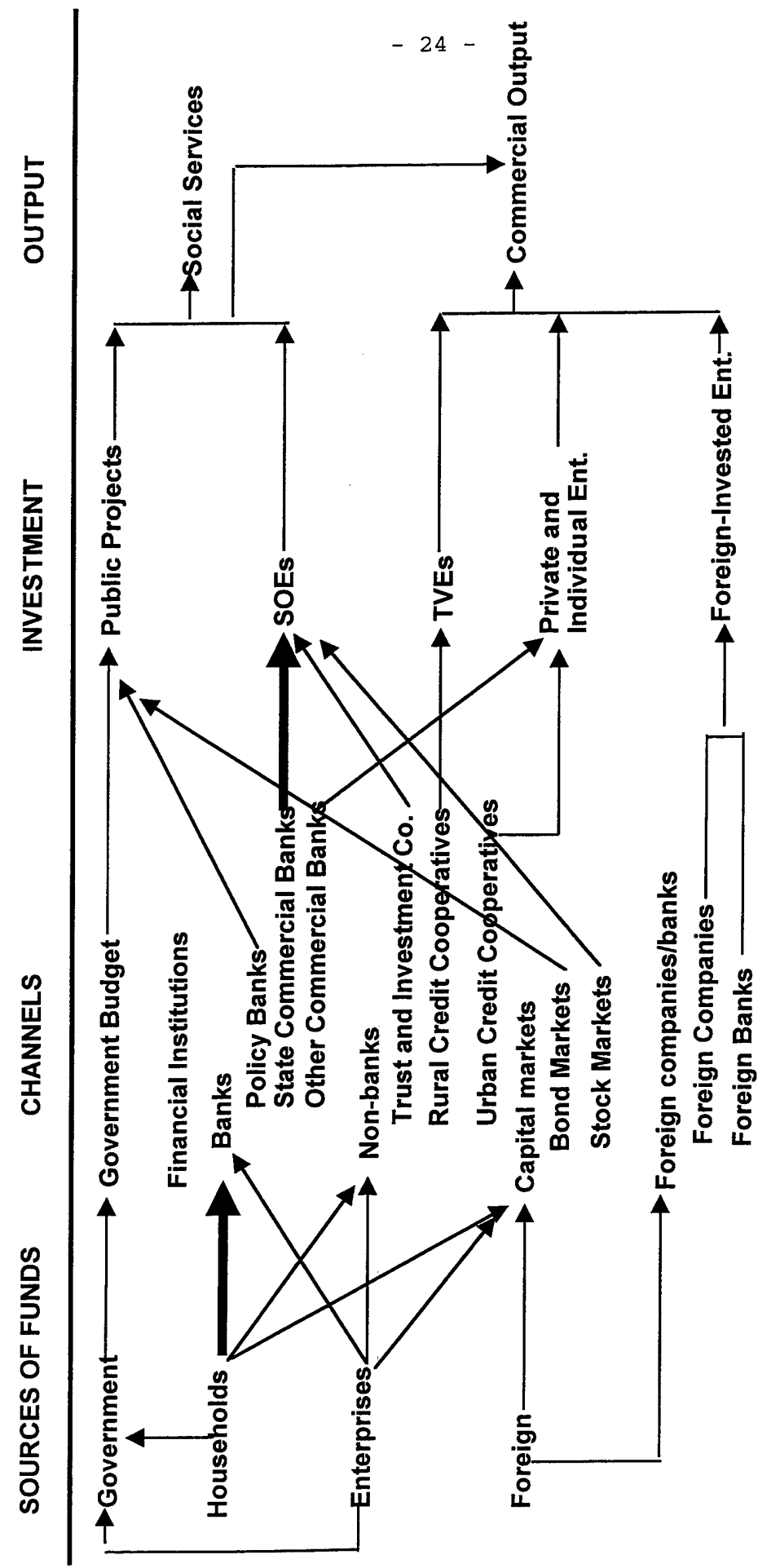
In equation (1), sources of funds (FUNDS) consist of funds from household savings (H), savings by enterprises (E), government savings (G), and foreign savings (F).

Government revenue comes from enterprises and households in the form of business and income taxes. Part of the government revenue goes to public consumption and the rest (government savings) goes to public investment. In many developing countries, where personal income is often low and household and business savings are often small, government savings is frequently the main source of funds for investment; however, personal and business income will grow as an economy develops, and so do household and business savings. This is also the case in China, where the government savings was the major source of investment until the early 1980s. As the economy developed further, household savings grew rapidly and replaced the government funds as the main source of investment funds. This will be discussed in detail in Chapter 5.

Business and household savings can either go to financial institutions in the form of bank deposits, or to capital markets in the form of stocks or bonds. Foreign sources of funds come in the form of loans from financial institutions, or foreign direct investment through foreign firms, or through capital markets in the form of portfolio investment.

²²It is an identity rather than an equation.

Figure 4.1. A Skeletal Model of Financial Institutions and Investment in China



CHANNELS OF INVESTMENT

Except for self-financing, there are four main external channels of investment, as outlined in the model. They are the government budget allocation, financial institutions (including banks and non-banks), capital markets, and the foreign sector.

Government Budget

$$\text{BUDGET} = G + \text{BOND} \quad (2)$$

Government budget (BUDGET) is a combination government revenue (G) and borrowing by issuing treasury bonds (BOND). As government revenue comes from households and enterprises in the form of income and business taxes, and purchasers of government bonds are also households and enterprises, the ultimate sources of funds for government budgets are therefore household income and enterprise profits.

Financial Institutions

Financial institutions as channels of investment include banks and non-banking financial institutions. Banks include policy banks, state commercial banks, and other non-state commercial banks. Major non-banks include rural and urban credit cooperatives, and trust and investment corporations.

1. Banking Institutions

a). Policy Banks (PBs)

$$\text{PBs} = f(\text{BUDGET}, \text{BOND}) \quad (3)$$

Major sources of funding for three policy banks (PBs) are central government budget appropriation (BUDGET) and financial bonds (BOND).

b). State Commercial Banks (SCBs) and Other Commercial Banks (OCBs)

$$\text{SCBs} = f(H, E, G) \quad (4)$$

$$\text{OCBs} = f(H, E, G) \quad (5)$$

Major sources of funding for the four state commercial banks and other non-state commercial banks are household savings (H), and deposits from enterprises (E), and government institutions (G).

2. Non-Banking Financial Institutions (NBFIs)

$$1) \text{ TICs} = f(E, G, F) \quad (6)$$

$$2) \text{ RCCs} = f(H, E) \quad (7)$$

$$3) \text{ UCCs} = f(H, E) \quad (8)$$

Trust and investment corporations (TICs) take trust deposits from enterprises (E) and provincial and local governments (G). They also raise funds from international financial markets by issuing bonds to foreign investors. In fact, the largest TIC, the China International Trust and Investment Corporation (CITIC), is one of China's major issuers of bonds in international markets.

Rural Credit Cooperatives (RCCs) and Urban Credit Cooperatives (UCCs) mainly accept deposits from households (H) and non-state enterprises (E). Rural household savings and deposits from township and village enterprises (TVEs) are the main sources of funds for RCCs, while savings of urban residents and deposits from urban private and individual enterprises fund the UCCs.

3. Capital markets

Capital markets in China include stock markets (STOCK) and bond markets (BOND).

$$\text{STOCK} = f(H, E, F) \quad (9)$$

$$\text{BOND} = f(H, E, F) \quad (10)$$

Households (H), especially urban households, enterprises (E), and foreign investors (F) are the major buyers of Chinese stocks and bonds. Shares for domestic investors are called A shares, while those for foreign investors are called B shares.

4. Foreign Channels

Foreign sources of funds (F) are channeled into investment in China either through foreign companies in the form of foreign direct investment (FDI), or through foreign banks in the form of foreign loans (FLOAN). Foreign portfolio investment is limited to purchase of B-shares in Shanghai and Shenzhen Stock Exchanges.

$$\text{FDI} = f(F) \quad (11)$$

$$\text{FLOAN} = f(F) \quad (12)$$

DESTINATIONS OF INVESTMENT

Destinations for investment can be divided into two categories: public sector and business sector. Public sector includes public projects (PP), such as infrastructure (e.g., Three Gorges Project), education, health care, and defense. The business sector includes different types of enterprises: state-owned enterprises (SOEs), which are owned by central and local governments; township and village enterprises (TVEs), which are located in rural areas and are either privately-owned or owned by township governments; urban collective enterprises (UCEs) which are often owned by city governments; urban private and individual enterprises (PIEs), which are pri-

vately-owned; shareholding enterprises which are corporatized and owned by shareholders; and foreign invested enterprises (FIEs), which include joint ventures or foreign wholly-owned enterprises.

1. Public Projects (PP)

$$PP = f(\text{BUDGET, PBs, SCBs, BOND, TICs}) \quad (13)$$

Public projects are funded through government budget (BUDGET), policy banks (PBs), state commercial banks (SCBs), and bonds (BOND). Local infrastructure projects are also partly funded through trust and investment corporations (TICs).

2. State-Owned Enterprises (SOEs)

$$SOEs = f(\text{SCBs, BUDGET, PBs, OCBs, TICs, STOCK}) \quad (14)$$

SOEs are mainly funded by state commercial banks (SCBs). The government budget (BUDGET) also subsidizes loss-making SOEs. SOEs in the strategic sectors are also supported by preferential loans from the policy banks (PBs). Other commercial banks (OCBs) and trust and investment corporations (TICs) also provide loans to SOEs. Some of the SOEs are listed on the stock exchanges and raise part of their capital through issuing shares.

3. Township and Village Enterprises (TVEs)

$$TVEs = f(\text{RCCs, SCBs}) \quad (15)$$

TVEs are mainly funded by rural credit cooperatives (RCCs). The state commercial banks (SCBs), mainly the Agricultural Bank of China, also provide credit to TVEs.

4. Urban Collective Enterprises (UCEs)

$$UCEs = f(\text{UCCs, SCBs}) \quad (16)$$

Urban collective enterprises are often owned and run by local governments. They obtain investment funds mainly through urban credit cooperatives (UCCs). State commercial banks also grant loans to UCEs.

5. Private and Individual Enterprises (PIEs)

$$PIEs = f(\text{UCCs, OCBs}) \quad (17)$$

Urban private and individual enterprises are supported by urban credit cooperatives (UCCs). Other non-state commercial banks (OCBs), such as the private Minsheng Bank, also extend loans to PIEs.

6. Foreign-Invested Enterprises (FIEs)

$$\text{FIEs} = f(\text{FDI, FLOAN, SCBs, OCBs}) \quad (19)$$

The most important source of funding for foreign invested enterprises (FIEs) in China is foreign direct investment (FDI). Other sources include foreign bank loans (FLOAN), loans from domestic state commercial banks (SCBs) and other non-state commercial banks (OCBs).

OUTPUT

Output in a society can be divided between social output and commercial output. Social output includes social services ostensibly providing such positive externalities as national defense, public transportation, education, and health care. Commercial output includes marketed goods and services. Public projects are supposed to provide social services and benefits to the society. Besides, some public projects also generate commercial output. For example, the Three Gorges Projects will also provide electricity besides controlling flood.

In a market economy, the corporate sector only provides commercial output. Companies provide such benefits as medical care insurance to their employees but do not directly provide such social services such as housing, medical care, and education to employees. In China, however, the state-owned enterprises are obliged to produce both social and commercial output. Not only do they produce marketed goods and services, SOEs also support a large part of the nation's social welfare system, including health care, education, pension, housing, income subsidies, and unemployment benefits. An example is a steel-making SOE in Southeast China.²³ But non-state enterprises in China, including village and township enterprises, private and individual enterprises, and foreign-invested enterprises, assume little social welfare function and produce only commercial output.

MAJOR LINKS IN THE MODEL

In order to be able to better understand the relationship between savings and investment and the role of the financial sector in this process, major links are described in the following paragraphs. They reflect the links in the preceding diagram and equations.

1. Households and enterprises contribute to the government budget through tax revenues. These are invested through state budget appropriation in either SOEs or public projects, which provide social services as well as commercial output.

2. Household savings are channeled into state banks to finance SOEs, which produce commercial output as well as social services. The major link, which is highlighted in the diagram, is household savings--state commercial banks--SOEs--social services.

²³See Appendix C.

3. Non-banking financial institutions, including rural and urban credit cooperatives, collect funds from rural and urban residents and invest in non-state enterprises, which only produce commercial output.

4. Capital markets collect funds from domestic as well as foreign residents and channel them to public projects either through bond issuing or shareholding companies listed in the stock exchanges, which consist of mainly SOEs.

5. Foreign companies and foreign banks channel foreign sources of funds to foreign invested enterprises in the form of either direct investment or loans.

PROPOSITIONS OF THE MODEL

The main theme of this study is that financial resources are misallocated under the current under-developed and state-controlled financial system; the delay in financial sector reform and development is because financial reform is closely related to state-owned enterprise reform, which cannot proceed without the reform of the social welfare system. Three propositions arise from the framework outlined in the model. The first proposition is related to the source of funds, while the second proposition is about the channels and destinations of investment. The third proposition deals with the social output functions of the state-owned enterprises and their relationship with the financial system.

Proposition One: Changing Source of Investment Funds

The government has lost its key position as the main saver in the economy, while rural and urban households became the main sources of savings; and the foreign corporate sector became an important provider of funds for investment in China.

Proposition Two: Misallocation of Capital

Allocation of capital by the financial system is inefficient in China as indicated by the fact that bank lending concentrated on slower growing, lower capital efficiency, and less profitable SOEs rather than on faster growing, higher capital efficiency, and more profitable non-state enterprises.

Proposition Three: Provision of Social Services

Reform of the banking system and state-owned enterprises, which are needed to improve the allocation of capital, have been delayed primarily because of the government's heavy reliance on state sector's provision of social services. Ambiguity regarding which SOEs are most efficient, or more or less efficient than non-state enterprises, arises from the additional costs that SOEs bear in providing social welfare services.

These propositions will be tested respectively in the following chapters, based on the data that the author collected from various sources and calculations using these data. Proposition one will be illustrated in detail in Chapter 5, while proposition two will be demonstrated in Chapters 6 to 9. Chapter 10 will be devoted to verify the third proposition.

5. FINANCING INVESTMENT: SOURCES OF FUNDS

This chapter discusses sources of funds for investment and the role of the financial sector in mobilizing savings. Funds for investment can be divided into four categories according to the sources as shown in equation (1): household savings (H), government savings (G), enterprise savings (E), and foreign savings (F) which include foreign direct and portfolio investment, and foreign loans.

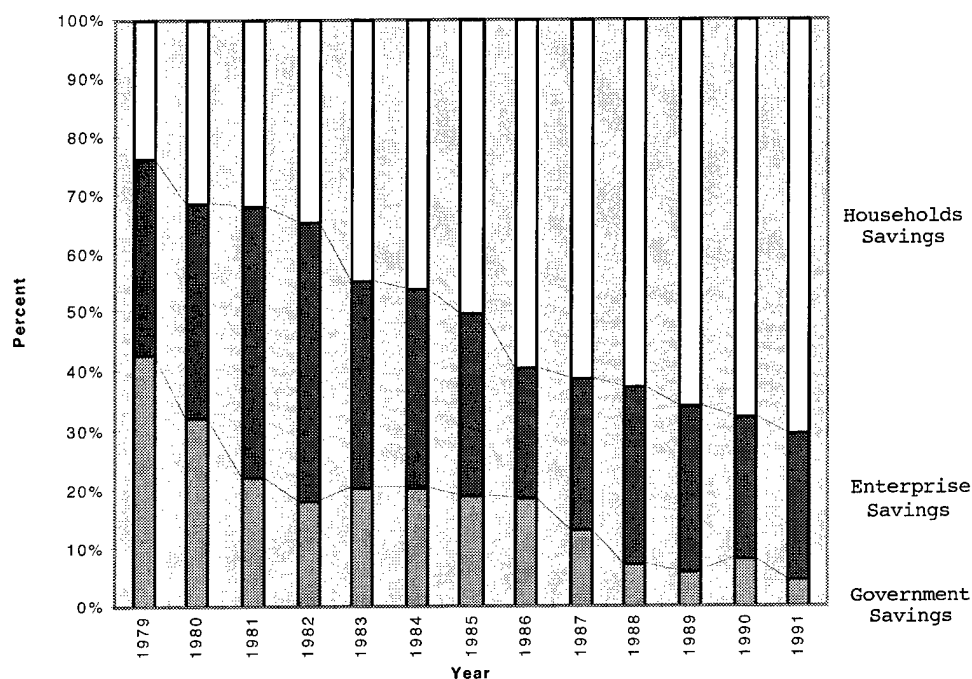
$$\text{FUNDS} = H + G + E + F \quad (1)$$

The chapter will demonstrate the Proposition One proposed in Chapter 4: There has been a change in the structure of sources of funds along with the decentralization process: the share of savings by the government has been declining while the share of household savings has been increasing since economic reform in the late 1970s; the government has lost its key position as the main saver in the economy, while rural and urban households became the main sources of savings; and the foreign corporate sector became an important provider of funds for investment in China.

CHANGING PATTERNS OF DOMESTIC FUNDS FOR INVESTMENT

The source of savings in China has changed in the course of economic reform and development. Before economic reform, the government was the dominant "saver" of the economy. As shown in Figure 5.1, the share in gross domestic savings by households, governments, and enterprises in 1979 was 23.6 percent, 42.8 percent, and 33.6 percent, respectively. However, in 1991, the share of government savings dropped to 4.1 percent, while the share of household savings deposits increased to 70.5 percent. Thus, *households have replaced governments as the main saver of the economy.*

Figure 5.1 Gross Domestic Savings by Sector, 1979-91



Source: Guo (1991), Xie (1993).

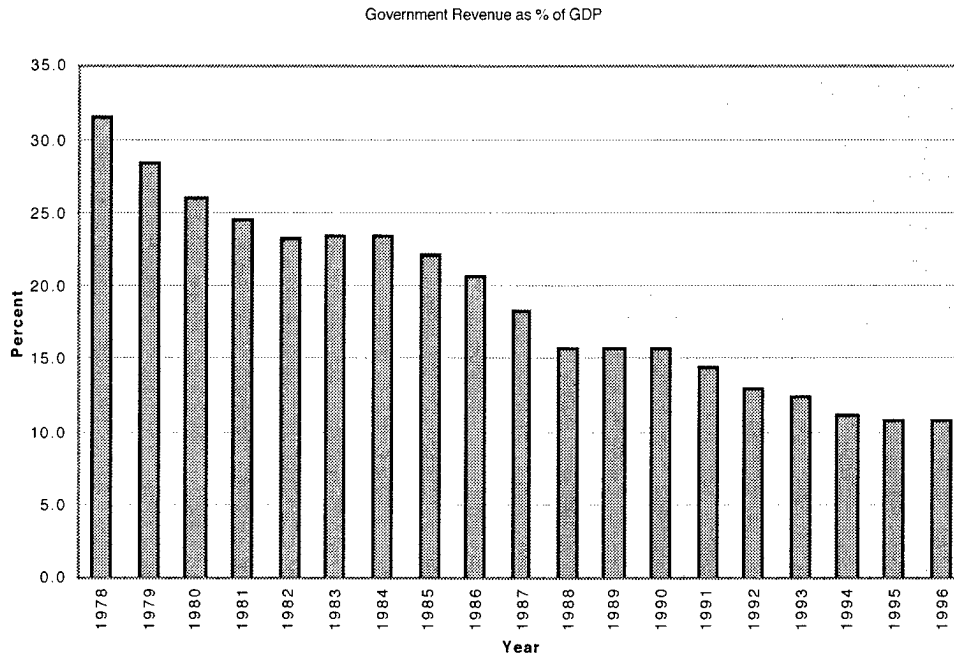
Decline in Government Savings

The changing structure of savings reflects the declining role of government in mobilizing savings. In fact, government revenue as a share in GDP has been steadily declining since the late 1970s, when the economic reforms started. As shown in Figure 5.2, the ratio of total government revenue over GDP dropped from 31.5 percent in 1978 to around 10.8 percent in 1996.

The decline of government revenue as a share in output reflects the decentralization of fiscal structure. Before economic reform, all state enterprises were required to remit profits to their government, and enterprises had no funds for their own investment. Reforms in the 1980s can be characterized as "releasing the control of and conceding profit to enterprises and workers." In 1980, the government began to allow state-owned enterprises to retain part of their profits as funds for investment, and for increases in employees' salaries and benefits. From 1983 to 1984, the proportion of profits retained in enterprises increased further. These measures transferred part of the fiscal revenue to enterprises and households.²⁴

²⁴Wang (1997).

**Figure 5.2 Declining Share of Government Revenue in GDP
(In Percentage)**



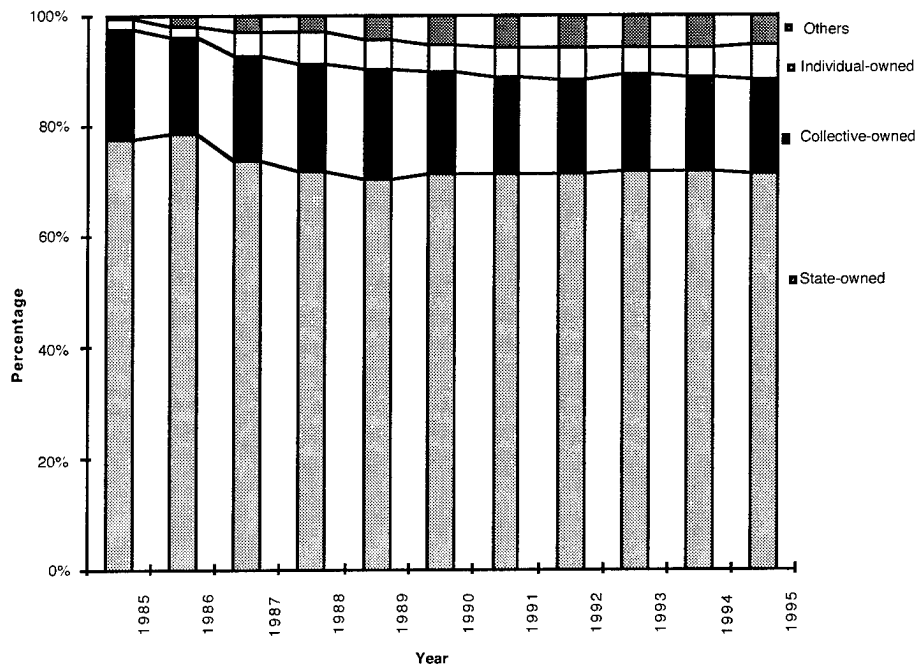
Source: Author's calculation based on China Statistical Yearbook (1997), p. 42 and p.235.

Growth of the non-state sector also fueled changes in the savings structure. The emergence of township and village enterprises (TVEs) and private and individual enterprises have greatly increased household income and corporate profits. The fact that the non-state sector comprises an increasing share of output reflects the fact that the government is ineffective in taxing the non-state enterprises.

In fact, despite its decline in output, the government still heavily relies on the state sector as its major source of revenue. As shown in Figure 5.3, the state sector, mainly the state-owned enterprises, contributed 71 percent of total government revenue in 1995.²⁵ The share had been fairly stable during 1985 to 1995, declining only 6 percentage points in 10 years. The lost share of the state sector is mainly filled up by the private and foreign sectors.

²⁵Part of the revenue from the state sector are paid back to SOEs as government subsidies to loss-making enterprises.

Figure 5.3 Contribution to Government Revenue by Sectors of Ownership (1985-95)



Source: China Statistical Yearbook (1997), p. 238.

Growth in Household Savings

The reform period has witnessed a dramatic growth of household savings. As shown in Figure 5.4, Household savings as a share in GDP was only 8 percent in 1979. However, it increased to 27 percent in 1991, more than three times the level when the economic reform began. Growth in household savings can also be shown in the increase in household savings deposits in the banking institutions, as most of rural and urban household savings are held in the form bank deposit. Cumulative stock of total rural and urban household savings deposits in financial institutions has increased from 6 percent of GDP in 1978 to 56 percent of GDP in 1996. Annual increase in household savings deposits as a share of GDP also jumped from 1.8 percent in 1979 to about 12.9 percent in 1996.²⁶

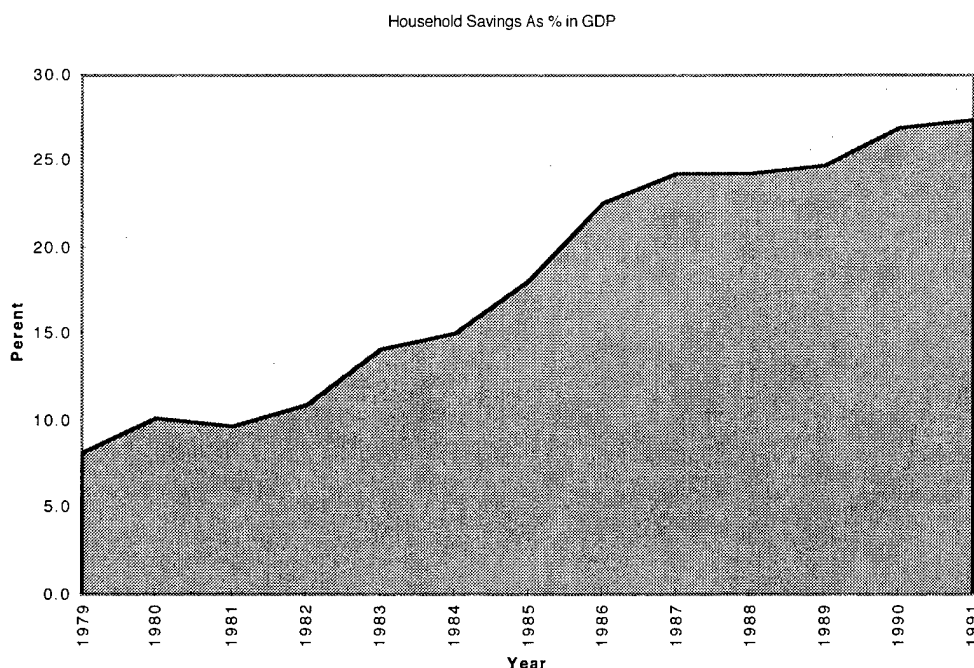
Rapid economic growth and growth of personal income as a result of economic reform is the major reason for the increase in household savings. Over the last 18 years, China's GDP had been growing at an average rate of 10 percent. Average real per capita income in the rural areas in 1996 was

²⁶PBC (1997a), p. 464.

more than five times that in 1978. Average real income per capita in the urban area also tripled between 1978 to 1996.²⁷

Another explanation for the increase in savings deposits in financial institutions has to do with the availability of alternative forms of financial assets. As we will discuss in Chapter 8, capital markets in China are still in the primitive stage of development and play a minor role in attracting savings. In 1996, loans extended by banks and non-banking financial institutions made up about 80 percent of total assets in the financial system. Funds raised through capital markets accounted for about one-fifth of total funds, of which stock and bond markets each comprised about 10 percent.

Figure 5.4 Household Savings as Percentage of GDP, 1979-91



Source: Figure 5.1, World Bank World Tables (1993).

Unavailability of consumer credit may have also played a role in the growth of household savings. Lack of consumer credit, such as mortgage loans, implies that part of the savings may be forced savings. It is estimated that one-quarter of savings for long-term purposes is held for the purchase of consumer durables.²⁸

Rapid demographic transitions may be another factor for the growth of savings. The rapidly aging population, the one-child policy and changes in the social welfare system may have forced people to save more for future spending. In fact, Chinese households tend to save for long-term pur-

²⁷China Statistical Yearbook (1997), p. 293, Table 9-4.

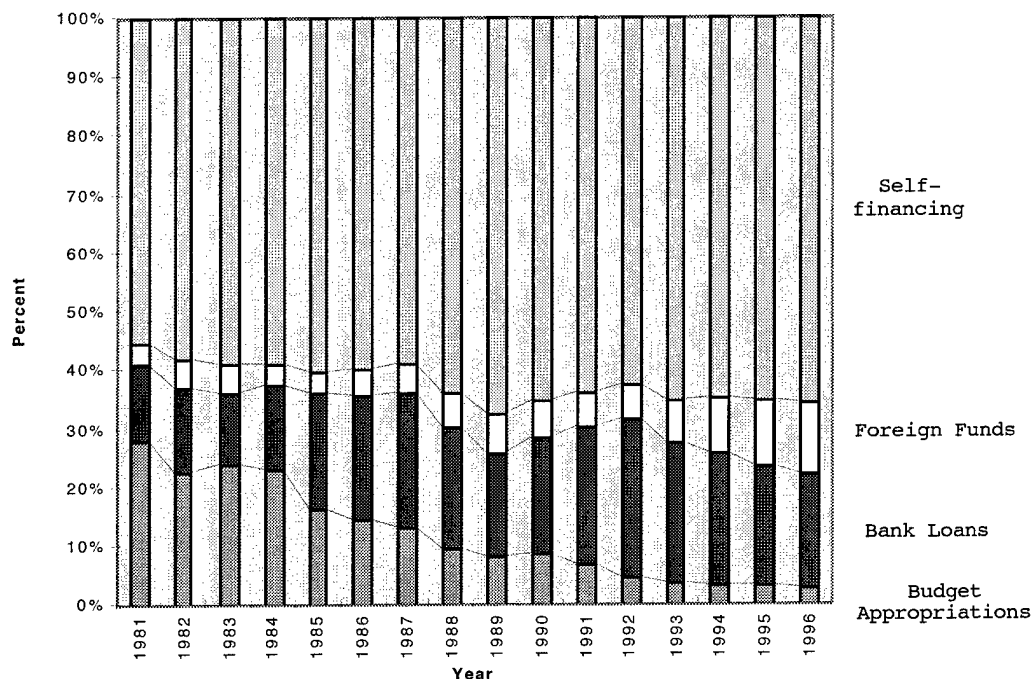
²⁸Jin (1994).

poses, as exemplified by the high and stable proportion of term deposits in their total deposits: two-thirds of total household deposits are fixed for a term of at least one year. According to the survey evidence gathered by Jin (1994), families' motives, including saving for child education and retirement, account for three-quarters of savings for long-term purposes.

Changes in the Sources of Investment

As a result of changing patterns of savings, the government is no longer the dominant supplier of funds for investment in the economy. Households have become the major sources of funds, channeled to investment through the financial institutions. Figure 5.5 reflects the changes in the pattern of sources of investment since the 1980s.

Figure 5.5 Sources of Investment for Fixed Assets, 1981-96



Source: China Statistical Yearbook 1997, p. 150.

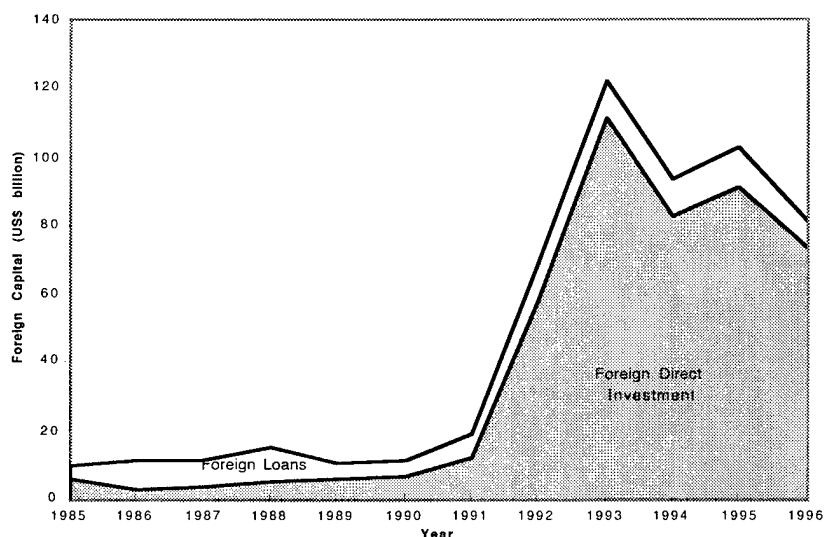
There are generally four types of funds for investment in enterprises. They are: government budget appropriations, loans from financial institutions, self-raised funds which include retained earnings and funds raised through issuing bonds and shares, and foreign investments. Starting in the 1980s, funds for investment in SOEs from government budgets have been reduced and replaced by state bank loans. In 1981, shares in total investment in fixed assets by government budget appropriations, loans of financial institutions, foreign investment, and self-raised

funds were 28.1 percent, 12.7 percent, 3.8 percent, and 55.4 percent. However, in 1996, the proportion of funds from government budget declined to 2.7 percent, while the proportion of bank loans increased to 19.5 percent. Self-raised funds also increased by 10 percentage points to 66 percent in 1996. The major part of self-raised funds is retained earnings. Funds raised from stock and bond markets are small. The share of foreign investment in total fixed assets also rose to 11.7 percent.

FOREIGN SOURCES OF FINANCING INVESTMENT IN CHINA

Foreign sources of investment include foreign borrowing and foreign portfolio and direct investment. Foreign borrowing can further be divided into official assistance from foreign governments and international financial institutions, and commercial loans from foreign banks.

Figure 5.6 Structure of Foreign Capital Flow to China, 1985-96



Notes: 1. Foreign investment in this figure are contracted foreign investment in China.

2. Numbers are in current US dollars in billions.

Source: China Statistical Yearbook 1997, p. 605.

Total foreign capital flow to China was small in the 1980s, as shown in Figure 5.5. Foreign borrowing is also dominated by official loans, and commercial loans has been small. Official borrowing accounted for about three quarters of all the foreign loans in 1996. Starting in the 1990s, foreign direct investment has become a dominant form of foreign investment in China. In 1996 FDI accounted for 90 percent of total contracted foreign investment in China

China experienced a modest growth in FDI in the 1980s, with the value of actual foreign investment growing at 2.14 percent annually between 1985 and 1990, as shown in Figure 5.6. However, the most dramatic growth occurred in the early to mid-1990s. Beginning in 1991, China attracted greatly increased amounts of FDI. The amount of contracted investment peaked in 1993,

reaching \$US 111 billion.²⁹ The actual investment more than doubled in 1992 and again in 1993, rising a further 22 percent in 1994 and 11 percent in 1995, reaching a total amount of \$37 billion. The amount of actual foreign direct investment in 1995 alone exceeded the sum of total foreign investment during 1979-92.³⁰

However, there has been a lag between the time when the investment contract was signed and the time when the capital was actually invested, as is shown in Figure 5.7. For example, the amount of contracted FDI reached a peak of \$111 billion, but actual investment laid out in that year was only \$27.5 billion, or a quarter of the contracted investment.

In order to see how long it takes for the contracted FDI to be actually invested in China, a model is set up to predict the level of actual FDI in the current period using the residuals of contracted FDI minus the actual FDI in the previous periods as the predictors. Data on contracted and actual FDI during the period 1985-96 was used in the regression. The following equation is the result of the modeling.³¹

$$\text{Actual FDI}_t = 1.69 + 0.15 \text{ Contracted FDI}_t + 0.14 (\text{Contracted FDI}_{t-1} - \text{Actual FDI}_{t-1}) \\ + 0.18 (\text{Contracted FDI}_{t-2} - \text{Actual FDI}_{t-2})$$

As we can see from our modeling results, 15 percent of contracted FDI in a given year period is actually invested in that year. Fourteen percent of the residual between the contracted and actual FDI in the preceding year is actually invested in the current year; and 18 percent of the residual between contracted and actual foreign investment in the preceding two years is actually invested in the current year. Altogether, 47% of contracted foreign investment in a year were actually invested in three years (including the year the contracted was signed). So more than half of contracted investment in a given

²⁹Official data from China Statistical Yearbook (1997). The accuracy of the data may be questionable, but there are no better data available. The dramatic increase of contracted foreign direct investment in China in 1992 and 1993 is partly due to Deng Xiaoping's Southern Tour in the Spring of 1992, which sped up the process of opening up for foreign investors after three years of adjustment since June 4th Incident in 1989. The jump in the amount of FDI in China in 1993 thus reflects the accumulated investment for the years between 1989 to 1992 that should be in place if there were no Tiananmen Incident. Foreign investors were eagerly to step into the China's huge potential market after China re-opened up for foreign investors.

³⁰Contracted foreign directed investment shows somewhat a different picture. It declined by 25.8 percent in 1994, but increased by 10 percent in 1995, and dropped again by 20 percent in 1996. The difference between actual and contracted foreign investment in China is addressed in the following paragraphs.

³¹All the coefficients for the three predictors and the constant are statistically significant at 5% level. The model has a good fit, with a R^2 of 0.99. However, given the small sample in the data, the results should be used cautiously in predicting longer term actual FDI in China.

year would not be actually invested until three years later (part of the contracted foreign investment may never actually be invested in China).

Why there is such a long time lag between contracted and actual investment? Lack of confidence in investment environment in China may be one of the reasons why actual investment has been delayed. Foreign investors may be cautious in pouring all the investment in at the beginning and usually want to spend first a few years as experiment. But another reason for the lag is probably the existence of significant barriers to foreign investment in China. According to a recent RAND study on economic openness, China is the least open country in areas of investment compared with the U.S., European Union, Japan, and South Korea.³² These barriers may have prevented investors from putting actual funds into place in a timely manner.

The dramatic increases in foreign direct investment in the first half of the 1990s appear to be caused by three factors. First, the FDI flows to developing countries in general increased significantly in the 1990s. Average annual flows in 1990-93 were double those of 1987-89. Secondly, Deng Xiaoping's "Southern Tour" in 1992 created another boom in Chinese economy, which together with the seeming political stability in the wake of the Tiananmen Incident, led to a reassessment of investment opportunities in China by multinationals. Third, the liberalization of investment and trade regulations also attracted foreign capital into China.³³

Foreign investment in China can be roughly divided into two categories, according to the source of foreign capital. One involves the so called "overseas Chinese" firms from Hong Kong, Macau, Taiwan, Singapore and other Southeast Asian countries; the other is comprised of "pure" foreign companies from the West, including the United States, Japan, and European countries, as well as South Korea. Investment from overseas Chinese accounted for about 70 percent of total foreign direct investment in China.³⁴

Foreign investment in China is largely concentrated in the manufacturing and real estate sector. In 1995, two-thirds of foreign investment went to the manufacturing sector, and another one-fifth to the real estate sector.³⁵ Western-affiliated investment and overseas Chinese investment also differs in sectoral distribution. Firms from Western countries tend to concentrate more on capital or technology-intensive manufactures, such as automotive, chemical, and telecommu-

³²Wolf, Levaux, and Tong (1998). The study includes a survey of business executives in 500 foreign and domestic firms on dimensions of non-tariff barriers to trade and investment in the five countries: the U.S., Japan, European Union, China, and South Korea, and a review of documents in legal and administrative barriers in these countries.

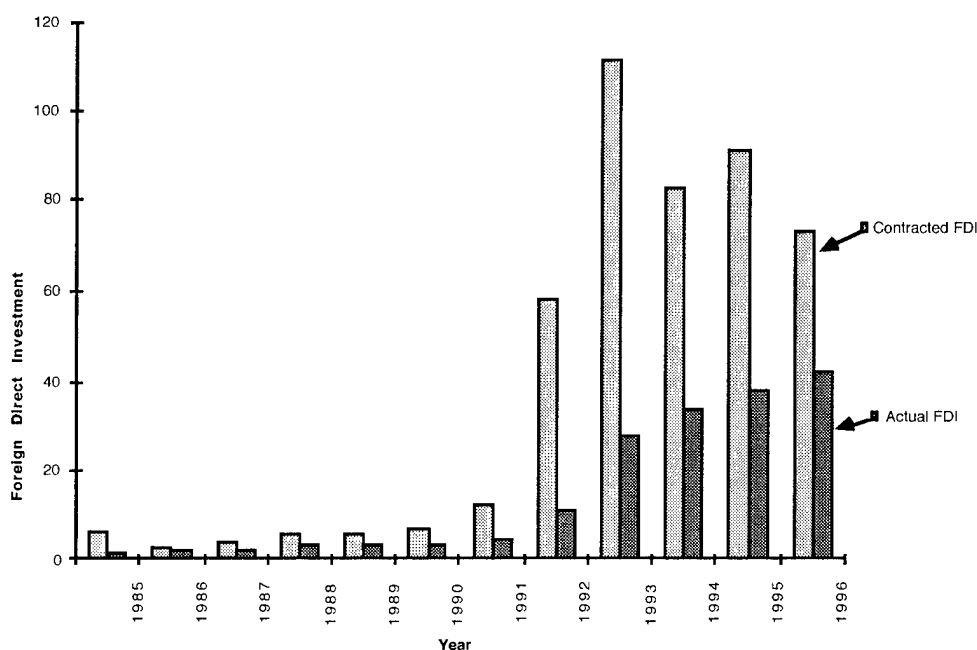
³³Lardy (1995), p. 1065.

³⁴China Statistical Yearbook (1996), p. 598.

³⁵China Statistical Yearbook (1996), p. 603.

nications equipment. Since the 1990s, there is also growing investment in the non-manufacturing sector, such as oil development and electric power.

Figure 5.7 Foreign Direct Investment in China: 1985-95



Note: Data are in current US dollars.

Source: China Statistical Yearbook 1997, p.605.

Overseas Chinese investors, on the other hand, tend to concentrate their investment on labor-intensive manufacturing industries, such as food processing, textiles, and consumer electronics. There is also growing investment in non-manufacturing sectors, such as infrastructure, and real estate.³⁶

Foreign investment is not evenly distributed geographically. It is heavily skewed toward the eastern coastal provinces. Eight out of the top ten foreign investment recipients are located in the eastern coastal region (except Beijing and the northeast province of Liaoning). The top ten recipients together accounted for more than 80 percent of total foreign investment in 1995.³⁷ While the inland areas accounted for a 42 percent share of China's GDP and a 33 percent of total industrial output in 1993, they received only 14 percent of total foreign investment. Investment projects in central and western regions tend to be smaller in size and less export-oriented than those in the eastern coastal region.³⁸

Foreign investment has flowed faster to the coastal areas than in the inland areas mainly because of the differences in investment environment and proximity to the source of foreign capital. However, government policies also affect the destination of foreign capital. The regionally

³⁶Imai(1995).

³⁷China Statistical Yearbook (1996).

³⁸Ma (1995).

tilted policies giving priority to the special economic zones (SEZs) and coastal cities in the late 1970s and mid-1980s boosted the competitiveness of the coastal areas, which were already superior to the inland regions in terms of investment environment, thereby further enlarging the gap between the inland and coastal regions. As a part of its measures to rectify regional imbalances, the Chinese government has started to open up the inland regions to foreign investment, and offer incentives equal to those in eastern coastal provinces.

In summary, decentralization of the economy and rapid growth of the non-state sector has led to the transfer of income from government to enterprises and households. The government has not been effective in collecting taxes from non-state enterprises; as a result, government revenue has been declining relative to output. The government has also lost its key position as the main saver in the economy and the direct provider of funds for investment in the state sector. By contrast, household savings have increased dramatically and become the main external sources of domestic financing. As a result, financial institutions, especially the state commercial banks, are now in a position of channeling household savings into investment in state and non-state enterprises, as well as public projects.

Foreign investment, especially foreign direct investment, played an important role in financing China's development since 1990s. However, there has been a large difference between the amount of contracted and actual foreign investment. The fact that only half of the contracted foreign investment was actually invested in China may partly due to the lack of confidence on China's market and partly because of the barriers to foreign investment in China.

So far, we have illustrated the first proposition outlined in Chapter 4, i.e., the structure of the sources of funds for investment has been changed in the course of reform: government ceased to be the main provider of the investment funds, a position replaced by household savings, which has assumed increased importance in financing investment in China; and foreign corporate sector has become a important provider of funds for investment in China. But through what institutions have these funds have been channeled to investment, where in the economy do these funds actually go, and how efficient are these funds utilized? These are the topics of Chapters 6-9. Chapters 6-8 will discuss the channels of investment--financial intermediaries, including the banking system, non-banking financial institutions, and capital markets. Chapter 9 will discuss the efficiency of investment in the economy.

6. CHANNELING SAVINGS TO INVESTMENT: THE BANKS

This chapter will assess the role that the banking institutions played in mobilizing funds and channeling them to investment. It will test the second part of the model and part of the Proposition Two: the banking institutions, which dominate the Chinese financial system, has been channeling household savings mainly to the state sector.

Banking institutions in China include state-owned banks and non-state owned banks. State-owned banks include the central bank, state commercial banks, and policy lending banks. Non-state banks include four nationwide commercial banks, five regional commercial banks, and one private bank. In the following sections we will discuss respectively these various types of banks and their functions as mobilizers of savings and channels of investment. In particular, we will present the structure of the sources of funds for and destinations of loans made by these banking institutions. This chapter is closely linked with equations 3-5 and 13-14 presented in Chapter 4.

STATE-OWNED BANKING INSTITUTIONS

State-owned banks include the central bank, the People's Bank of China, four state-owned commercial banks, and three policy banks. We will first discuss the sources of funds and destinations of the loans of the state banks in general before a detailed analysis of the state commercial banks and policy banks.

As we have shown in Table 3.1, state banks as a whole accounted for 82 percent of total funds of all the financial institutions. They also attracted 72 percent of total deposits, and extended 77 percent of total loans in 1996. Most of the funds in state commercial banks are from household and enterprise savings deposits. As shown in Table 6.1, deposits accounted for 78 percent of total funds for state banks. Household savings alone accounted for 45 percent of their total funds in 1996. As the central banks and the policy banks do not receive deposits from households, the share of deposits, and in particular household deposits in total funds by state commercial banks should be even higher than that of state banks in general.

Table 6.1
Sources of Funds for State Banks³⁹ (1996)
(In Percentage)

	Share in Total Funds
Deposits	78.4
Household Savings Deposits	45.1
Government Deposits	3.5
Enterprise Deposits and Others	29.8
Own capital	4.3
Other Funds	17.3
Total	100
(Billion Yuan)	(6,324.67)

Note: See footnote

Source: Author's calculation based on data from PBC (1997a), p. 471.

State banks, particularly state commercial banks, are the main recipients of savings deposits, especially household savings. As shown in Table 6.2, as much as 72 percent of total deposits, and 74 percent of household savings deposits went to state banks in 1996. This data highlights the key role that state banks are playing in channeling household savings into investment.

Table 6.2
Distribution of Savings Deposits by Types of Financial Institutions (1996) (In Percentages)

	Total Deposits	Household Savings
State Banks	72.3	74.0
Other Banks	4.2	1.3
Rural Credit Cooperatives	12.9	19.9
Urban Credit Cooperatives	5.8	4.8
Trust Companies and Others	4.8	-
Total	100	100
(Billion Yuan)	(6857.12)	(3,852.1)

Source: Author's calculation based on data from PBC (1997a), p. 465.

State banks mainly serve state industrial and commercial enterprises, as shown in Table 6.3. Working capital loans to state industrial, commercial, and construction enterprises account for about 60 percent of total loans extended by state banks in 1996. Fixed asset loans, which also mostly go to industrial SOEs and state infrastructure projects, were a quarter of total loans granted by state banks. The non-state sector, including the township and village enterprises, and

³⁹Under the statistical classification by the Almanac of China's Finance and Banking, "State banks" in this table include the central bank, three policy banks, four state commercial banks, Bank of Communications, CITIC Industrial Bank, and post savings.

urban collective and individual enterprises, and foreign-invested enterprises, only received about 15 percent of total state bank loans.

Table 6.3
Direction of Loans of State Banks (1996)
(In Percentage)

	Share in Total Loans
State Sector	84.4
State-Owned Enterprises	59.1
Fixed Asset Loans	25.3
Non-state Sectors	15.6
Urban Collective Enterprises	2.5
Individual Enterprises	0.0
Foreign-Invested Enterprises	2.6
Loans for Agriculture*	5.0
Other Loans	5.5
Total	100
(Billion Yuan)	(4,743.47)

Note: 1. State-owned enterprises include industrial, commercial and construction enterprises.
2. Loans for agriculture include loans to village and township enterprises.
Source: Author's calculation based on PBC (1997a), p. 465.

Commercial Banking--State Commercial Banks

China has four state commercial banks: the Industrial and Commercial Bank of China (ICBC), the Bank of China (BOC), the Agricultural Bank of China (ABC), and the China Construction Bank (formerly the People's Construction Bank of China). ICBC mainly provides working capital loans to state industrial and commercial enterprises, BOC provides trade finance, ABC provides credit to agriculture and rural industries, and CCB provides funds for construction and fixed asset investment. While there have been overlaps in their business and increased competition among them, their core businesses have not changed.

The four state commercial banks still dominate the financial sector, although they are facing increasing competition from rapidly growing non-state commercial banks and non-bank financial institutions. The share of the four state commercial banks in total assets of financial institutions declined from 77 percent in 1993 to 70 percent in 1996, as shown in Table 6.4.

Table 6.4
Structure of Assets of Financial Institutions, 1993 and 1996
(In Percentage)

	1993	1996
State Commercial Banks	77.0	70.3
Other Commercial Banks	4.6	7.9
Rural Credit Cooperatives	8.8	10.3
Urban Credit Cooperatives	2.8	3.6
Other institutions	5.8	7.9
Total	100	100

Note: 1. Other financial institutions include trust and investment companies, finance companies, and policy banks. 2. Assets of the central bank is not included.

Source: PBC (1997a), p. 525.

The four state commercial banks have been playing major roles in mobilizing savings from households and enterprises and channeling them to investments. As shown in Table 6.5, the "big four" received 63 percent of total deposits, and extended 78 percent of total loans in 1996. The Industrial and Commercial Bank of China is the largest among the four: it alone accounted for about 30 percent of loans of the financial system.

Table 6.5
Share of Four State Commercial Banks In Total Deposits and Loans of Financial Institutions (1996)
(In Percentage)

	Deposits	Loans
Industrial and Commercial Bank of China	27.7	29.2
Bank of China	4.1	17.4
Agricultural Bank of China	13.9	14.7
China Construction Bank	17.0	16.3
Total	62.7	77.6

Source: Author's calculation based on data from PBC (1997a), pp. 502-504, p. 465.

State commercial banks have been highly regulated by the government, which has been using state banks to channel funds to SOEs and priority sectors. In order to do so, the government has limited competition in the sector. Entry of foreign and domestic new banks are strictly limited, and there is also limited competition among the four state banks themselves. In fact, until the mid-1980s, the state commercial banks were truly "specialized" banks, serving particular sectors and were not allowed to enter each other's sectors of business. The situation was changed in the later 1980s to encourage competition, but barriers for entry of new domestic and foreign banks remained high.

Policy Lending and Policy Banks

Generally speaking, policy lending are loans extended by state banks at the direction of government. Before the policy banks were established, all policy lending were carried out through the four state commercial banks. Since policy loans are meant to support the priority sectors identified in the government's economic policies, they are mandatory. Therefore, the projects to be financed with these loans might not meet commercial banks' criteria for lending.

Although there is no uniform definition of policy-based lending, the following five categories of policy-based loans can be identified:⁴⁰

- power and transport infrastructure investment loans, which can be sound financially but are generally large and have long-term repayment periods;
- fixed asset loans designed to enhance the technology of state-owned enterprises (SOEs) included in the five-year plan, regardless of their financial health;
- working capital loans to priority SOEs, including structurally loss-making enterprises of significant national or regional political impact;
- loans for subsidized sectors, such as education and health;
- loans for the development of rural areas, including the alleviation of poverty;
- loans for imports of technology and promoting exports.

According to the World Bank estimates, the outstanding stock of policy lending at the beginning of the 1990s reached about one-third of total outstanding loans extended by the banking system.⁴¹ The size of broadly defined policy lending, which includes loans extended to loss-making SOEs at the direction of government, are difficult to estimate.

Policy banks in China are similar to development banks in other countries. There are three policy banks: the State Development Bank, the Agricultural Development Bank of China, and China Import and Export Bank. The State Development Bank makes loans for infrastructure and key industrial developments including 1) highways, ports, power, and railways; 2) basic industries, such as steel and the chemical industries, and raw materials; 3) emerging industries, such as automobile and electronics; and 4) other priority state projects in other sectors, including forestry and agriculture. The State Development Bank directed one-fifth of its loans to infrastructure, mostly in transportation, and two-thirds of its loans to energy and raw materials. Another 11 percent of its loans went to support strategic industries, as shown in Table 6.6.

⁴⁰Mehran *et al.*(1996).

⁴¹Mehran *et. al* (1996), p. 14.

Table 6.6.
Destination of Loans by the State Development Bank (1996)

	Share in Total Loans (%)
Infrastructure	20.4
Energy and Raw Materials	67.0
Strategic Industries	11.2
Other Industries	1.4
Total	100
(Billion Yuan)	(88.8)

Note: Strategic industries include petrochemical, machinery, electronics, and automotive industries. Other industries include defense industries, textiles and light manufactures.

Source: Author's calculation based on data from PBC (1997a), p. 526.

The Agricultural Development Bank finances crop purchases and food reserves and lends for poverty alleviation and rural infrastructure. The Export and Import Bank focuses its support on business related to international trade, by providing import and export credit.

Since policy lending is a quasi-fiscal activity, the funding of the policy banks is becoming a critical issue. Policy banks are funded by a combination of bonds, government budget, and central bank lending, as shown in Table 6.7.

Table 6.7.
Sources of Funds for Policy Banks (1996)
(In Percentage)

	State Development Bank	Agriculture Development Bank	Import-Export Bank
Financial Bonds	77.8	1.5	74.4
Central Bank Loans	-	85.6	-
Own Capital	12.8	1.8	11.7
Others	9.4	11.1	13.9
Total (Billion Yuan)	100	100	100
	(280.28)	(712.45)	(21.56)

Source: Author's calculation based on data from PBC (1997a), p. 500-502.

In 1996, about three-fourths of total funds of the State Development Bank and Import-Export Bank were raised through issuing financial bonds. Major purchasers of these bonds were actually the four state commercial banks. For the Agriculture Development Bank, loans from the central bank accounted for more than 85 percent of its total funds.

The main motivation of establishing three policy lending banks in 1994 was to separate policy lending from commercial lending and channel the flow of new policy lending through these newly created institutions. This is a significant step toward the commercialization of the state commercial banks. In addition, the clear separation of policy lending from commercial

lending will facilitate the implementation of the indirect monetary policy, that is, liquidity management at the level of the system, rather than liquidity management at the level of individual banks or liquidity management simply to meet the targets of the credit plan, or both.⁴²

All government investment financed by banks are expected to be made through these policy banks. In 1996, loans extended by three policy banks accounted for 8.2 percent of total loans extended by all the financial institutions.⁴³ The new policy banks removed the burden of one type of policy lending from the state commercial banks. This move also makes the costs of subsidizing such policy lending more explicit. If professional banking standards are applied, it could also generate efficiency gains in the management of public investment.

However, the key issue is the extent of autonomy to be accorded to policy banks. It is not yet clear whether policy banks are to operate as banks, evaluating loans independently, or as government departments, implementing decisions made by the State Planning Commission or the State Economic and Trade Commission. Current procedures suggest an amalgam of the two. On the one hand, the State Development Bank is often under pressure from the State Planning Commission to finance government projects that have low profitability. On the other hand, projects that receive an endorsement from the State Planning Commission can still, on occasion, be rejected by the State Development Bank's loan committee based on the bank's evaluation of the creditworthiness of the projects.⁴⁴ Indeed, the State Development Bank refused to finance some 10 percent of proposed projects in 1994 on the ground that these projects did not meet their lending requirements.⁴⁵

The policy banks represent only one aspect of policy lending, however. Under the Commercial Bank Law of China which was promulgated in 1995, state commercial banks are required to provide loans for projects approved by the State Council, China's cabinet. This seems to indicate that policy lending might not be confined to the policy lending banks. Indeed, the PBC sets many interest rates according to industrial policy or broader policy objectives rather than commercial ones, and the state commercial banks are still obliged to carry the loans. Moreover, as we discussed above, the biggest burden to the state commercial banks is providing working capital loans to loss-making SOEs. The policy banks have no role in financing these, and there is no sign whether these loans will be transferred to the central government budget, which has already been declining relative to GDP. The creation of the policy banks is therefore just one step toward a comprehensive reform of China's financial sector.

⁴²Mehran *et al.* (1996), p. 14.

⁴³Author's compilation based on data from Almanac of China's Finance and Banking (1997).

⁴⁴World Bank (1996b), p. 35.

⁴⁵World Bank (1996a), p. 105.

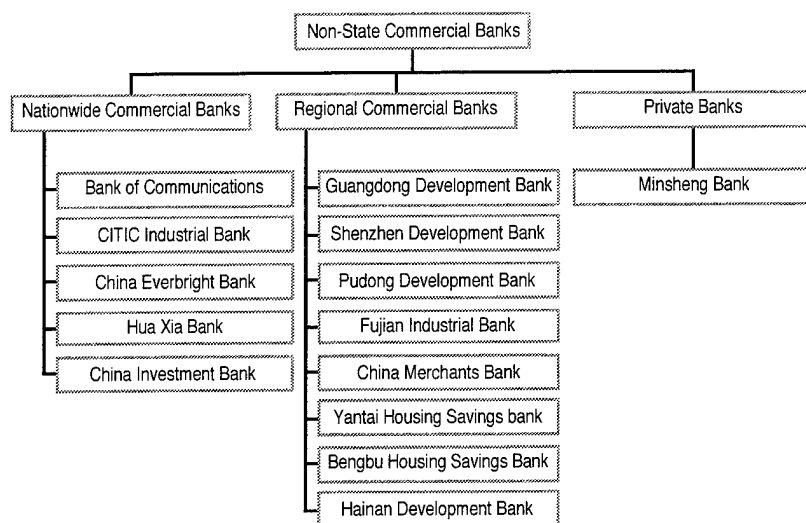
In sum, the state banks, especially the four state commercial banks, dominate the financial institutions in China. They are the main receivers of household savings, and their loans are directed by the government mainly to finance state-owned enterprises and public projects. The establishment of policy banks is a major step toward the commercialization of the state banks. However, the four state commercials have not yet been fully released of the responsibilities of extending policy loans.

NON-STATE BANKING INSTITUTIONS

Commercial Banking--Non-State Commercial Banks

Non-state commercial banks consist of five nationwide banks, eight regional commercial banks, and one private bank. Except for the nationwide commercial banks that were established in the late 1980s, most other banks were established in the 1990s. The newest bank is the Minsheng Bank, the only private bank in China. The emergence of the non-state commercial banks in China is a result of the increasing demand for financing for local development and the rapid growth of the non-state sector.

Figure 6.1 Non-state Commercial Banks in China



Compared with state commercial banks, the non-state commercial banks are much smaller in terms of assets. As shown in Table 6.4, total assets of non-state commercial banks accounted for 7.9 percent of total assets of all financial institutions in 1996, an increase of 3.4 percentage points from 1993.

Most non-state banks are shareholding banks, with provincial and local governments and enterprises as major shareholders. Major sources of funds are enterprise deposits, which accounted for two-thirds of total credit funds of these banks in 1996. Household savings deposits made up another 16 percent of their credit funds, as shown in Table 6.8.

Table 6.8.
Non-State Commercial Banks: Sources of Funds

Sources of Credit Funds	Share in Total Funds (%)
Total Deposits	94.4
Enterprise Deposits	67.3
Household Savings Deposits	16.1
Other Deposits	11.0
Own Capital	5.6
Total Funds	100
(Billion Yuan)	(306.4)

Note: Two non-state commercial banks, Bank of Communication, and CITIC Industrial Bank, are not included in this, according to the classification of PBC.

Source: Author's calculation based on data from PBC (1997a), p. 463.

As they are often partly owned by SOEs and local governments, non-state commercial banks mainly serve their stakeholders. As shown in Table 6.9, working capital loans to industrial and commercial SOEs made up 44 percent of total loans of non-state commercial banks. Loans to private and foreign enterprises only accounted for 7.4 percent of the total loans portfolio. The category "other loans" include loans for infrastructure and real estate, which are often affiliated with local governments.

Table 6.9.
Loan Portfolio of Non-State Commercial Banks

Types of Loans	Share in Total Loans (%)
Industrial and Commercial SOEs	44.0
Individual Enterprises	0.7
Foreign-Invested Enterprises	6.7
Fixed-Asset Loans	5.3
Other loans	43.3
Total	100
(Billion Yuan)	(193.6)

Source: Author's calculation based on data from PBC (1997a), p. 465.

The only truly private bank is the Minsheng Bank, which was set up in January 1996 by All China Federation of Industry and Commerce, an association of private enterprises. The establishment of Minsheng Bank was in response to the complaints from non-state enterprises on diffi-

culties in obtaining credit from state banks. It serves mainly non-state enterprises, including private and individual enterprises, and TVEs. It is audited by Price-Waterhouse and operates as a modern commercial bank.⁴⁶

In sum, the non-state banks, although there are not state-owned, are often closely affiliated with municipal and local governments and mainly serves as means for financing local industrial, infrastructure, and real estate development. Real private banks which serves exclusively the non-state enterprises are rare. Non-state banks are smaller in scale compared with the four state commercial banks, and they only play a minor role in mobilizing household savings and channeling savings to investment.

Foreign Banking Institutions in China

Foreign banks have been licensed to operate in China for over a decade. Foreign banking institutions in China fall into three categories: 1) Branches established by foreign banks, 2) Foreign banks with representative offices, and 3) Joint venture banks between Chinese banks and foreign banks. The representative office became the first investment vehicle available to foreign banks after China adopted the open-door policy. Representative offices provide introduction, contracts, and service promotion for the parent banks. However, the representative offices are prohibited from engaging in any profit-making operations. Bank branches offer a more complete range of commercial-banking services, including trade finance, foreign currency loans, and securities underwriting. Joint-venture banks allow foreign banks greater access to the domestic market, but this format limits the foreign bank's control over finances and management.⁴⁷

Foreign banks were first authorized to open branches in the Special Economic Zones (SEZs) in 1985, and in large cities in 1992. By the end of 1996, the representative offices opened by foreign financial institutions numbered 527, of which 288 were opened by foreign banks. The operational establishments of foreign financial institutions numbered 156, including 131 bank branches, 6 Sino-foreign joint venture banks, and 5 wholly-owned foreign banks.⁴⁸

By the end of 1996, foreign banking institutions (including foreign finance companies) had total assets of US\$29.92 billion, total loans outstanding of US\$19.43 billion, and total deposits outstanding of US\$3.89 billion, and after-tax profits of US\$ 180 billion.⁴⁹ The assets of foreign banking institutions accounted for 3.2 percent of total assets of China's domestic financial institu-

⁴⁶Flanigan (1998).

⁴⁷Lees and Liaw (1996), p. 33.

⁴⁸China Financial Outlook 1997, p. 60.

⁴⁹China Financial Outlook 1997

tions.⁵⁰ Compared with the United States, Hong Kong, and Singapore, the size of the foreign bank sector in China is still small, as shown in Table 6.10.

Table 6.10.
Foreign-Owned Banks' Share of Total Assets of Financial Institutions

Country	Foreign banks' share in total assets (%)
China	3.2
Hong Kong	78.0
Singapore	80.0
Taiwan	4.7
Korea	5.1
Indonesia	3.7
Thailand	7.1
Mexico	1.2
United States	22.0
Japan	1.8
Germany	3.9

Source: PBC (1997); Goldstein and Turner (1996)

The primary reason for allowing entry of foreign banks initially was expanding trade with foreign countries. However, as more foreign companies are investing in China, demand for financial services has increased. Foreign banks play roles of channeling foreign funds to investment in China, and provide financial services to foreign companies. The entry of foreign banks also brings modern banking skills and technology to China, and increases competition in the financial sector, which would be beneficial to China's financial reform.

Major sources of credit funds for foreign banks in China come from their foreign headquarters or affiliated banks, which made up 70 percent of total liabilities of foreign banks, with domestic deposits accounting for only 13 percent of their total funds in 1996, as shown in Table 6.11. On the asset side, loans, mainly foreign currency loans to foreign-invested enterprises, and loans on imports and exports of foreign companies, accounted for 65 percent of total foreign assets in 1996. This indicated that foreign banks mainly depend on their foreign affiliated banks to finance their investment in China. Foreign banks act as intermediaries to channel foreign funds into investment in China.

Major receivers of foreign bank loans are foreign-invested enterprises, including joint ventures and wholly-owned foreign enterprises.⁵¹ The lack of reliable information on other borrowers, and the lack of adequate accounting rules and bankruptcy law impede the credit assessment

⁵⁰Author's estimate based on the data from PBC (1997)

⁵¹Dipchand *et al* (1994), p. 187.

process and prevent foreign banks from expanding their services to firms other than foreign-invested enterprises.

Table 6.11.
Foreign Banks in China: Sources and Uses of Funds (1996)

Sources of Funds	Share in Total Funds (%)
Inter-bank borrowing	6.0
Funds from overseas affiliated banks	70.7
Deposits	13.0
Capital	6.6
Other	3.7
Total	100
(US\$ billion)	(29.92)
Uses of Funds	
Inter-bank lending	6.6
Funds to overseas affiliated banks	18.8
Loans	64.9
Other	9.7
Total	100
(US\$ billion)	(29.92)

Source: Author's calculation based on data from PBC (1997a), p. 499.

Although foreign currency loans are the core business of foreign banks, China has started a pilot program since 1996 to allow some foreign banks to conduct limited *renminbi* business in Pudong, Shanghai. This marked a significant step in opening up the financial sector for international competition.

In summary, state banks, especially the four state commercial banks dominate the banking sector in China. They are the major absorbers of household and business savings, but they are highly controlled by the government and their funds are mostly invested in state-owned enterprises and public projects in preferential terms. Non-state enterprises only receive a small part of credit from state banks. Establishment of policy banks relieved a partial burden of state commercial banks in policy lending, but state commercial banks are still required to finance loss-making SOEs.

Non-state commercial banks are small compared with state commercial banks. Funds of these banks are mostly from SOEs and local governments, and their loans also mainly go to finance SOEs and local investment. Only one bank is a truly private bank, which serves exclusively non-state enterprises.

Foreign banks channel foreign funds from their affiliated banks to invest in foreign-invested enterprises in China. Domestic currency business are highly restricted for foreign banks so they are not yet able to mobilize domestic savings in large scale. The share of foreign banks in the banking system is still very small and they play a limited role in capital formation in foreign-invested enterprises, which are mainly financed by foreign direct investment. The entry of foreign banks to China is still highly regulated and their business scope are restricted so they constitute only very limited competition to the domestic banking system, which is dominated by the state banks.

In the following chapter, we will discuss another part of the financial system--the non-banking financial institutions (NBFIs), and its role in mobilizing savings and financing investment. In particular, we want to see what role the NBFIs have played in financing the growth of the non-state sectors in China.

7. CHANNELING SAVINGS TO INVESTMENT: THE NON-BANK FINANCIAL INSTITUTIONS

Non-banking financial institutions (NBFIs) in China consist of financial institutions other than the banks (not including the capital markets, which are the topics of the next chapter). They constitute mainly informal institutions such as Rural Credit Cooperatives (RCCs), Urban Credit Cooperatives (UCCs), and Trust and Investment Corporations (TICs). Other NBFIs include finance and insurance companies, and securities firms.

The objective of this chapter is to examine the role of NBFIs as financial intermediaries. Part of the Proposition Two will be tested in this chapter, i.e., the emergence and rapid development of non-bank financial institutions is one of the major achievements of the financial sector reform in China; the development of NBFIs is in response to the development of non-state enterprises in the real sector, which have difficulties accessing the formal banking sector. NBFIs have played an important role in financing the growth of non-state enterprises, especially the township and village enterprises, and urban individual and private business in the last 20 years. This chapter is closely linked with equations 6, 7, 8 and 15, 16, 17 presented in Chapter Four.

THE DEVELOPMENT OF NON-BANKS: RURAL CREDIT COOPERATIVES

Rural credit cooperatives (RCCs) are credit unions set up by peasants for mutual financial assistance. Development of these cooperatives began in the early 1950s but suffered major drawbacks during 1958-78 as household farming was replaced by the commune system. After 1979, with the successful reform in agriculture and the emerge of the township and village industries, the RCCs have developed rapidly and played a major role in rural finance.

In terms of ownership, RCCs are non-state, collectively-owned enterprises. They are owned by their members, mostly rural households, and operate as shareholding enterprises. Rural households join the collective and buy the shares on a voluntary basis and can withdraw their funds freely. The assets of a RCC belong to the collective, which holds them on behalf of all the shareholders. RCCs are established as legal entities with independent operations, separate accounting, independent management and responsibility for profit and losses.⁵² Although RCCs are under the supervision of the local branches of the Agricultural Bank of China, RCCs are less government controlled than the state banks, and extend loans more likely under commercial criteria.

⁵²Dipchand *et al* (1994), p. 95.

By the end of 1996, there were 49,692 independent rural credit cooperatives employing more than half a million full-time employees.⁵³ They absorbed about 13 percent of total deposits, 20 percent of household savings, and granted 10 percent of total loans in the financial system.⁵⁴ Their total assets (in nominal terms) have grown at an average rate of 25 percent annually between 1988 to 1994.⁵⁵ Share of assets of RCCs in total assets of all financial institutions (except the central bank) have also increased from 8.8 percent in 1993 to 10.3 percent in 1996.⁵⁶

Table 7.1
Rural Credit Cooperatives: Sources and Users of Credit Funds (1996)

Sources of Funds	Share in Total Funds (%)
Deposits	94.1
Household Savings Deposits	82.1
Rural Collectives Deposits	12.0
Own Capital	5.9
Total	100
(Billion Yuan)	(934.2)
Uses of Funds	
Loans	73.1
Agriculture	17.2
Township and village enterprises	37.9
Other loans	17.9
Reserves at the central bank	22.2
Government Bonds	4.7
Total Assets	100
(Billion yuan)	(870.7)

Note: Total sources of funds and total uses of funds did not match due to statistical discrepancies. Some funds have channeled into activities that are not reported.

Source: Author's calculation based on data from PBC (1997a), p. 452 and p. 465.

The main source of finance of RCCs is rural household savings deposits, while the main users of funds are township and village (TVEs) enterprises. As the balance sheet of the RCCs shows, rural household savings deposits accounted for 82 percent of total credit funds of RCCs, and 87 percent of total deposits. Rural households are also net savers, as they used only 18 percent of total funds in the form of loans (in the category of "other loans"). In contrast, deposits by rural collectives including TVEs constitute 12 percent of funds for RCCs, while loans granted to them grasp a

⁵³PBC (1997a), p. 591.

⁵⁴See Table 3.1 and Table 6.2.

⁵⁵Girardin (1997), p. 28. Average inflation during this period is 15 percent.

⁵⁶See Table 6.4.

share of 38 percent of total assets and half of their total loans in 1996. *Therefore, the RCCs played the role of channeling rural household savings into investment in township and village enterprises.*

In sum, the RCCs played important roles in mobilizing rural household savings and channeling them into productive investment in the rural industries. However, their small size, and informal nature have prevented them from serving a larger role as a main vehicle of investment in the rural area.

THE DEVELOPMENT OF NON-BANKS: URBAN CREDIT COOPERATIVES

*The emergence of credit cooperatives in the urban area was the result of the growth of the urban collective-owned and individual-owned enterprises. The state-controlled banking system has difficulties in providing the various and flexible services required by the urban collective and individual-owned enterprises. In some places, it was very difficult for these enterprises to even open a banking account and deposit money, let alone to borrow from state banks. Urban credit cooperatives emerged to fulfill these needs.*⁵⁷

UCCs have emulated the philosophy and business practices of RCCs in the urban area. Like the RCCs, UCCs are independent legal entities with independence of operation and management, and sole responsibility for profits and losses. The characteristics of UCCs can be summarized as "collectively-owned, democracy in management, and flexibility in operation."⁵⁸ Regarding ownership, UCCs are collectively owned, credit union-type organizations with members as shareholders. They include urban collective and individual-owned enterprises, as well as urban residents and households. Management of UCCs are conducted in a democratic way. Daily management is the job of the director appointed by the UCC council, which is elected annually by the shareholder representative committee. This committee also elects the steering committee which supervises daily operations. Compared with state banks, UCCs have greater flexibility in operation. They can freely set the lending rates within a margin determined by PBC--which has been as large as 30 percent.

Compared with other financial institutions, UCCs have had the fastest growth since the first UCC was established in 1979. Total assets (in nominal terms) of UCCs increased from 9.2 billion yuan in 1987 to 187.9 billion yuan in 1993 and further to 422.2 billion yuan in 1996, an average real growth rate of 166 percent a year. Their share in total assets of the financial system also increased from 2.8 percent in 1993 to 3.6 percent by the end of 1996. The number of institutions

⁵⁷Dipchand et al (1994), p. 101.

⁵⁸Girardin (1997), p. 45.

reached 4,630 in 1996, almost triple compared with that of 1987. The number of employees in UCCs also increased from 26,497 in 1987 to 143,493 in 1995.⁵⁹

*Major sources of credit funds of UCCs are urban household savings and deposits of urban non-state enterprises, which made up 90 percent of total funds, as shown in Table 7.2. Savings by urban residents alone accounted for more than 40 percent of total funds, and 45 percent of total deposits. On the user side, UCCs primarily serve urban non-state enterprises, including urban collective enterprises, and private and individual enterprises. Loans to these enterprises accounted for more than half of UCCs' total funds. As a comparison to other financial institutions, UCCs absorbed 5.8 percent of total deposits, and 4.8 of total household savings deposits in the financial system, and granted 4 percent of total loans of all financial institutions.*⁶⁰

Table 7.2
Urban Credit Cooperatives: Sources and Uses of Funds (1996)

Source of Funds	Share in Total Credit Funds
Deposits	90.4
Enterprises deposits	33.5
Household savings deposits	41.4
Other deposits	15.5
Own Capital	4.8
Others	4.8
Total	100
(Billion Yuan)	(442.2)
Users of Funds	
Loans	55.3
Urban Collective Enterprises	32.5
Individual-Owned Enterprises	4.9
Other Loans	17.9
Reserves at the central bank	17.6
Government Bonds	2.2
Others*	24.9
Total	100
(Billion Yuan)	(442.2)

Note: Other uses of credit funds may include inter-bank market lending and lending to SOEs that are not reported.

Source: Author's calculation based on data from PBC (1997a), p. 453 and p. 465.

Under PBC regulations, UCCs are allowed only to provide services to private and collectively-owned enterprises as well as urban residents, but the PBC grants them a rather low credit ceiling within the comprehensive credit plan. So much of their resources were held either in the form of reserves in the central bank, or were lent in the inter-bank market. In 1996, required re-

⁵⁹PBC (1997a), p. 591.

⁶⁰See Table 3.1 and Table 6.2.

serves plus deposits in the central banks comprised about 18 percent of their total assets. Inter-bank lending and other lending accounted for a quarter of their assets.

UCCs have performed a useful role in the Chinese economy. They have centralized idle funds, mobilized urban households, and channeled them to urban non-state enterprises. *Just as the rural credit cooperatives that have promoted the development of township and village enterprises, the UCCs have played a major role in financing the growth of urban private and individual enterprises.* They have also increased the competition in urban banking services which are dominated by state commercial banks.

However, due to their small scale in lending and informal nature, UCCs have not been able to meet the growing demand for financing from the urban private sector. Starting in 1995, the central bank has decided to merge UCCs in some large cities and upgrade them to Urban Cooperative Banks (UCBs). Initially the government authorized UCCs in five cities --Beijing, Shanghai, Shenzhen, Shijiazhuang, and Tianjin--to merge to form urban cooperative banks to serve small and medium private firms more effectively. The Beijing Urban Cooperative Bank, for example, was formed from the merger of ninety local urban credit cooperatives and opened in 1996. Urban Cooperative Banks is organized as joint stock company with original members of UCCs, urban private and individual enterprises, and local governments as shareholders. By the end of 1996, UCCs in 18 cities had been upgraded into UCBs and opened for business. Their total assets reached 214 billion yuan, about half of the assets of all UCCs.⁶¹

THE DEVELOPMENT OF NON-BANKS: TRUST AND INVESTMENT CORPORATIONS

The third most important of non-banking financial institutions in China is trust and investment corporations (TICs). From a Western perspective, a TIC is a combination of a trust company and a development bank. It can accept deposits like a trust company in a developed market economy, and can finance projects, as approved by the state, like a development bank.

The trust industry in China developed in the 1920s but had disappeared by the end of 1950 as a result of the implementation of the credit plan. It reemerged in China's financial system in 1979, with the onset of economic reform. *Their reemergence and growth was due to increasing demand from SOEs and local governments for a new form of financial intermediation to provide financing that the state commercial banks are not able to provide because of controls by the central government.* There are generally two types of TICs according to the sources of funds: those affiliated with state banks and those affiliated with provincial and local governments. The decentralization of investment decisions increased the autonomy of state-owned enterprises in the use of retained earnings.

⁶¹PBC (1997a), p. 111-2

They are allowed to deposit (entrust) their surplus funds with banks for the latter to lend. Banks react by setting up trust departments, the latter to become the trust and investment corporations. Bank-controlled TICs also became the major channels for the state banks to sidestep the credit plan, as loans by TICs are not subject to the control of the plan.

Proliferation of provincial and local government-controlled TICs was a result of fiscal decentralization from central to local governments. Decentralization and growth of non-state enterprises increased the extra-budgetary revenue for provincial and local governments. These governments or their agencies sought means to direct these funds to finance local priority projects and also to seek higher returns on their accumulations than available through bank deposits. Local governments and their agencies thus established their own trust and investment corporations, funded largely by such extra-budgetary resources.

TICs, especially those in the national and provincial level, are important institutions to tap foreign financial resources through overseas bond issues. The China International Trust and Investment Corporation (CITIC), for example, was created as a 'window' for overseas borrowing. Important provincial and municipal governments, especially those in the coastal regions, were permitted to set up their own international TICs for overseas fund raising.

In general, TICs had rapid growth after they first reemerged in 1979. Total assets of TICs grew from 29 billion yuan in 1986 to 390 billion yuan in 1994, and share of total assets of TICs in the financial system also increased from 1.7 percent in 1986 to 3.5 percent in 1994.⁶² At the end of 1994, there were 393 TICs, of which 185 were affiliated with state banks, 16 others operated on the national level, and 190 were established by provincial and local governments. However, the distribution of assets of TICs is highly skewed. The four largest TICs made up nearly half of the total assets by the end of 1994. CITIC alone accounted for over one-third of assets of all TICs.

However, The development of TICs has been rather cyclical. Contractions in their business occurred in 1982, 1986 and 1988 as the central government adopted austerity programs to control inflation and domestic credit. This is because TICs are one of the major sources of credit outside of the credit plan and a major source of funding for local investments. TICs thus can be viewed as "extension departments" of their sponsors, established to handle a variety of activities, including project management, issuing securities, and consultancy and leasing. The loans and deposit structures indicate that they have relatively few clients and are not retail operators like banks or credit cooperatives.⁶³

Trust and investment corporations also serve as a mechanism for avoiding interest rate restrictions on lending. First, although TICs are subject to interest rate controls established by the

⁶²Kumar *et al* (1997), p. 7.

⁶³Dipchand *et al* (1994), p. 111.

PBC for both assets and liabilities, they have from time to time officially been permitted to operate within a band of interest rates prescribed for banks. In 1994, for example, their lending rates could vary around a 30 percent band relative to bank lending rates. Second, TICs have been able to routinely 'adjust' official interest rates with fees, compensating balances and other transactions. While non-bank financial institutions were supposed to follow bank interest rates on their lending activity, they have more flexibility in setting their lending rates and have been better able to partially escape regulations on interest rates.

At the time when TICs were established as separate legal entities, their funding was intended to consist largely of deposits from the following five sources: government financial departments, enterprises, social insurance and welfare funds (such as pension), funds from non-governmental organizations such as scientific research institutes and foundations. TICs are primarily capitalized by one year or longer deposits from their sources, as well as other types of assets including real estate.

Table 7.3
Trust and Investment Corporations: Sources and Uses of Funds (1996)

Sources of Funds	Share in Total Funds (%)
Deposits	72.8
Designated deposits	48.8
Trust deposits	18.2
Other deposits	5.7
Own Capital	15.9
Inter-bank borrowing	10.0
Others	1.3
Total Funds	100
(Billion Yuan)	(343.1)
Uses of Funds	
Loans	88.9
Designated loans	44.8
Trust loans	18.8
Other loans	20.3
Reserves at the central bank	5.1
Others	6.0
Total assets	100
(Billion Yuan)	(326.16)

Note: 1. Data on this table include also leasing companies. 2. Total sources of funds exceeded total uses of funds. Some of the lending activities, such as lending on real estate may have not been reported

Source: Author's calculation based on data from PBC (1997a), p. 455.

As Table 7.3 shows, *deposits are the main source of funding of TICs, accounting for up to 73 percent of total funding in 1995. Most deposits are entrust or designated deposits, and mainly come from the enterprises and governments. Entrust or designated deposits are funds for designated projects*

and are held in trust until needed to finance implementation. Trust deposits are surplus funds that are not targeted for any special use. Designated deposits comprised almost two-thirds of TICs' deposits, and about half of their total funding. The inter-bank money market has also been a major source of funding for TICs in recent years, accounting for about 10 percent of their total funding.

On the lending side of TICs' balance sheet, *the loans portfolio accounted for about 89 percent of their total assets*. Designated loans made up about half of their total loans, and 45 percent of total assets. Loans that are not for specific purposes accounted for another half of the loans portfolio, indicating that TICs have been engaged in commercial bank lending and investment bank lending. In fact, *TICs are among the major funding sources in real estate construction. TICs borrowed funds from state commercial banks through inter-bank money markets and on-lent the funds directly to various projects, particularly in the real estate sector, or to affiliate securities and finance companies*. State commercial banks were able to evade credit controls by transferring funds to their affiliated TICs through the inter-bank market, which in turn on-lent them to real estate and local projects. Such 'leakage' to TICs have been identified as a major source of the inflationary pressures that emerged in early 1993.

In sum, the TICs in China emerged as a result of increasing demand for financial services that state banks cannot fulfill. They have facilitated the flow of financial resources among banks and among enterprises and brought more efficient allocation of resources. TICs have also been an important source of finance for regional development, especially in the coastal regions. They also helped to raise funds from international capital markets.

However, as TICs primarily serve SOEs and local governments, they have played a minor role in financing the growth of rural and urban non-state enterprises. TICs have also brought risks to the financial system and to the economy. From a macroeconomics point of view, TICs have been used by state banks and local governments to circumvent efforts by the central government and the PBC to impose strict limits on credit expansion. Under a system where the central bank mainly relies on credit quota as an instrument of monetary policy and indirect instruments are primitive, the expansion of credit through TICs created inflationary pressure and caused cyclical fluctuation of the real economy.

TICs' close affiliation with state banks, state-owned enterprises and local governments also brought significant financial risks to their own operations. As we mentioned earlier, TICs often serve as "extension departments" of state banks or local governments. As a result, loan decisions were often made at the direction of state banks or government agencies rather than being based

on commercial criteria. Such cozy relationships also made the supervision by PBC on TIC extremely difficult. TICs have shifted focus from relatively risk free entrust and trust lending to high risk areas such as real estate development, making them vulnerable to fluctuation in the real estate markets.

The development of non-banking financial institutions (NBFIs) is one of the major characteristics of financial development in China since economic reform. The rural and urban credit cooperatives have developed rapidly and have played significant roles in mobilizing rural and urban household and business savings and channeling them to investment in non-state enterprises. RCCs and UCCs are the main sources of financing for village and township enterprises, and urban private and individuals. Trust and investment corporations have facilitated flow of funds among commercial banks and enterprises, and have been an important source for regional development.

However, NBFIs are small in scale compared with the banking system dominated by state commercial banks. Their total assets are only one-fifth of total assets of all financial institutions. These institutions, especially rural and urban credit cooperatives, are informal in nature and lack modern banking skills. As a result, they have not been able to meet the growing demand for financial services from the rural and urban non-state enterprises.

In the next chapter, we will discuss the last and the newest part of the financial system: the capital markets, including the stock and bond markets, and their role in financing investment in China.

8. CHANNELING SAVINGS TO INVESTMENT: THE CAPITAL MARKETS

Capital markets are relatively new types of financial intermediaries compared with other financial institutions in China--the first stock market reemerged in China only in 1990. How have the capital markets developed in China, and what role have they played in financing investment in China? These are the questions that this chapter intends to answer.

This chapter is closely linked to equations 9, 10, 13, and 14 presented in chapter 5. It will test part of the Proposition Two: capital markets in China are under-developed and primarily serve as channels for the government to raise funds for investment in public projects and state-owned enterprises; non-state firms' access to capital markets has been very limited.

We will begin the discussion on the role of financial markets in economic development, followed by the discussion of the three main types of financial markets in China: stock markets, bond markets, and money markets.

THE ROLE OF CAPITAL MARKETS IN ECONOMIC DEVELOPMENT

Well-developed capital markets enlarge the range of financial services. Short-term money markets can facilitate the flow of financial resources and provide competition to the commercial banks in supplying short-term credit to business sectors, while stock and bond markets can provide long-term finance to government as well as business enterprises.

The development of capital markets in developing countries usually start with government securities trading, often treasury bonds. Bond markets provide a non-inflationary way to finance government deficit. They also allow governments to implement monetary policy through open market operations and provide a market-based reference point for setting interest rates. Corporate bond markets also provide new sources of short term loans other than commercial banks. By enabling corporations to issue short-term securities in the form of commercial paper, money markets make the corporate loan market more competitive and reduce the market power of large commercial banks.⁶⁴

Capital markets provide long-term debt and equity finance for government and the corporate sector. By making long-term investment liquid, capital markets mediate between the conflicting maturity preferences of lenders and borrowers. Capital markets also facilitate the dispersion of business ownership and the reallocation of financial resources among corporations and industries.

⁶⁴World Bank (1989), p. 109.

A primary reason for the underdevelopment of the capital markets in developing countries is the dominance of the banking institutions, often the state banks, in the financial system. Governments are often reluctant to relinquish the control over financial resources, which are often directed into state-owned enterprises or priority sectors, and the dominance of the state banks facilitate such control.

CAPITAL MARKETS IN THE CONTEXT OF THE FINANCIAL SYSTEM

Similar to many other developing countries, the financial system in China is dominated by the state banking institutions, and financial markets are underdeveloped. Capital markets, including bond and stock markets, played a minor role in financing China's growth, as shown in Table 8.1.

Table 8.1

Financing Investment: The Role of Financial Institutions and Capital Markets (1996)

Type of Finance	Value of Finance (Billion Yuan)	Value of Finance (in percentage)	Value of Finance as Percentage of GDP
Loans by Financial Institutions	6,115.28	78.0	89.1
Banks	4,937.11	63.0	72.0
State Banks	4,743.47	60.5	69.1
Other Banks	193.64	2.5	2.9
Non-banks	1,178.17	15.0	17.1
Capital Markets Capitalization	1,722.00	22.0	25.1
Stock Markets	984.24	12.6	14.3
Bond Markets*	737.96	9.4	10.8
Total	7,837.28	100	114.2

Note: * Total value of bonds outstanding by the end of the year.

Source: Author's compilation and calculation based on data from PBC (1997a), p. 465, p. 472 and p. 478.

Financial institutions, including banking and non-banking financial institutions provided about 80 percent of total finance in the economy in the form of loans, of which state banks alone supplied 60 percent of funds in 1996. Funds raised through capital markets together provided less than a quarter of total funds.

The underdevelopment of capital markets in the financial system is a result of the dominance of the banking sector. For years the government has restricted the corporate sector from raising funds through channels other than bank loans, while banks have been controlled by the government to finance loss-making SOEs and priority sectors. The banking sector absorbed most of household savings in the form of bank deposits.

STOCK MARKET DEVELOPMENT IN CHINA

Once the home of the largest stock market in Asia, China eliminated securities-market activities in its economy after the Communist victory in 1949. Although economic reform started in 1978, the development of modern stock markets in China only started in 1986. This is primarily due to political reasons: until the mid-1980s, the Chinese government still considered the shareholding system counter to the socialist economy in China. However, economic reform has created a need for a new form of finance other than bank credit. Firms started to issue shares to their employees in 1986 and informal stock exchanges had formed in some cities in the late 1980s, but the largest trading centers were formed in Shanghai and Shenzhen. The Shanghai stock market started in 1986 when the PBC Shanghai branch set up an over-the-counter (OTC) market for securities exchange. By 1990 the OTC market achieved considerable success. In the first half of 1990, the trading volume in Shanghai accounted for about half of nationwide trading. Another development was in Shenzhen, where an OTC market emerged in 1988, mainly trading shares of the Shenzhen Development Bank. By 1990, several other shares were traded in this market, leading to a significant increase in volume of trading that the OTC market could not handle. As a result, the government decided to formalize the securities trading in these two cities. In November 1990, the Shanghai Stock Exchange was formally established. The Shenzhen Stock Exchange was officially recognized in the Spring of 1991.⁶⁵ There are several regional exchanges established in cities of Shenyang, Wuhan, Tianjian, and Dalian, which are linked to Shanghai and Shenzhen. The Shanghai and Shenzhen Stock Exchanges were established as non-profit entities with a membership system, and governed by a Board of Directors.

The opening of stock markets in Shanghai and Shenzhen marked one of the most important parts of China's financial reforms. Stock markets are seen as an alternative way of mobilizing funds from the public and channeling them to productive investment, a channel that would be more efficient than the state banks. Another factor that was taken into consideration for the development of stock markets was the financial risks and costs of large stocks of household savings in the banking system. As we have seen in Chapter 4, rural and urban household savings amounted to more than 50 percent of GDP in 1996, a figure unprecedented in any other country. A loss of confidence in the banking system or rising inflation may trigger a sudden withdrawal of bank deposits, as it happened in 1988, and would cause a liquidity crisis. The equity market offers a new type of financial asset that differs from bank deposits for rural and urban residents to invest their savings.

⁶⁵Mehran *et al* (1996), p. 33.

Despite the need for direct finance from the corporate sector and the need of a new type of financial assets for household savings, another reason that the government decided to foster the development of the stock market in China was the reform of the state-owned enterprises. While full-blown privatization seemed not to be an option to the government in reforming SOEs, Chinese economists have advocated the transformation of SOEs to shareholding companies, or "corporatize" SOEs in western concept.⁶⁶ Such type of privatization, i.e., sell shares to the public and diversify SOEs' ownership, would facilitate the reform of SOEs and reduce the reliance of SOEs on government subsidies and state bank loans. It was expected that stock markets would help the SOEs to become more efficient and competitive internationally. By listing on stock exchanges, SOEs would be able to attract domestic and foreign capital, gain access to foreign technology, and adapt international accounting and management practices.⁶⁷

Despite good intentions from the government and the public, *the development of stock markets has been slow*. The level of stock market development, measured as market capitalization as a percentage of GDP, started with less than 1 percent in 1990 and 1991, rose to 9.4 percent in 1994 but then dropped to 6 percent in 1995, as shown in Table 8.2. It was only in 1996 that a significant increase in market capitalization was seen: it rose to 14 percent of GDP by the end of the year. *But its level of market capitalization is still much lower than financially-matured economies such as the United States, Hong Kong, and Singapore. It is also lower than many other emerging market economies, including Indonesia and Mexico*, as indicated in Table 8.3.

Table 8.2

China's Stock Market: Market Capitalization and Liquidity (1990-96) (Shanghai and Shenzhen Combined)

Year	Market Capitalization as % of GDP	Liquidity Ratio* (%)
1990	0.07	-
1991	0.50	40.4
1992	4.40	91.6
1993	9.40	107.0
1994	8.00	224.1
1995	6.00	118.4
1996	14.30	191.4

*Note: Liquidity ratio is defined as annual total trading value divided by market capitalization.

Source: PBC (1997a); International Finance Corporation (1997)

⁶⁶Lees and Liaw (1996), p. 63.

⁶⁷Chen and Thomas (1997), p. 8.

The stock trading in China's stock markets is more active than many other stock markets in the world, as indicated by the liquidity ratio. This may reflect the fact that the stock trading has been new to most Chinese, and the so called "stock fever" has not cooled down yet. It may also reflect the fact that the size of the stock markets is still very small compared with the size of the household savings, and there is high demand for stocks. However, level of liquidity was highly affected by changes in government monetary policies. For example, the year 1995 saw a significant decline in liquidity ratio, the year the austerity program was implemented. This is probably because funds are channeled into stock markets for speculation from state banks, and trust and investment corporations, funds that should be used for other purposes. When there is tightening of credit, these funds would have to be pulled back, causing high volatility in markets.

Table 8.3
Stock Market Capitalization: International Comparison (1996)

Country	Market Capitalization as % of GDP	Liquidity Ratio (%)
China	14.3	191.4
United States	115.6	83.3
Japan	67.2	28.5
Hong Kong	216.6	47.4
Taiwan	99.5	171.8
Korea	28.6	127.7
Singapore	159.7	17.3
Indonesia	40.3	35.3
Thailand	53.9	44.4
Mexico	31.8	40.4

Source: World Bank (1998); International Finance Corporation (1997)

Stock markets in China are also segmented. The fragmentation of China's stock market is reflected by separate markets in Shanghai and Shenzhen, and by the type of shares traded in the exchanges. Although its stock markets are much smaller than in developed countries, China operates two separate markets, and decisions on which companies should be listed on which market are made by the central government. Market capitalization of Shanghai Stock Exchanges accounted for 55 percent of total market capitalization of Shanghai and Shenzhen combined. The Shanghai Stock Exchange represents a more national market, and most listing firms are large and medium sized SOEs from all over the country. In contrast, the Shenzhen Stock Exchange is more like a regional market, and the listed companies are generally located around the Shenzhen Special Economic

Zone. Compared with those in Shanghai, the size of listed firms in Shenzhen is generally smaller.⁶⁸

There are two classes of stocks traded in the markets: A shares and B shares. The A-shares are reserved for Chinese residents and are denominated in *renminbi*, the Chinese currency. The B-shares are exclusively reserved for non-residents. The Shanghai and Shenzhen Stock Exchanges began offering B-shares to foreign investors in February 1992. Both B-shares and A-shares are settled and quoted in *Renminbi* but B-shares are settled in U.S. dollars in Shanghai, and in Hong Kong Dollars in Shenzhen. The B-share are not convertible to A-shares, and therefore they are not substitutable. This produces a completely segmented stock market. Compared with A-shares, the value of B-shares is much smaller. In 1996, total market value of A-shares was 24 times that of B-shares, as shown in Table 8.4. The value of B-shares made up only 4 percent of total market capitalization. Thus, stock markets in China mainly serve as vehicles of mobilizing domestic funds and channeling them to investment. Their roles in attracting foreign portfolio investment is still very limited.

Table 8.4
Stock Market Capitalization by Markets and Shares (1996)

	A-Shares	B-Shares	Total
Shanghai Stock Exchanges	531.6	16.2	547.8
Shenzhen Stock Exchanges	413.2	23.2	436.4
Total	944.8	39.4	984.2

Note: Numbers are in billion yuan.

Source: PBC (1997a), p. 478.

Due to limited capabilities of Shanghai and Shenzhen Stock Exchanges in attracting foreign investors, the government has decided to make use of foreign stock markets to raise funds for domestic firms. Some of the Chinese firms are allowed to be listed in Hong Kong and New York Stock Exchanges. The Chinese companies were first listed in the Hong Kong Stock Exchange on October 24, 1994. There are also so called Red Chip stocks in Hong Kong. These are Hong Kong firms controlled by Chinese corporations or Hong Kong companies that derive considerable profits from operations in China. By employing a so-called 'back-door listing' approach, a Chinese company can acquire a Hong Kong firm and invest in it. The Chinese company can then get listed in Hong Kong without going through the approval process by the Chinese government. The best example of a Red Chip firm is CITIC Pacific, a subsidiary of CITIC, managed by the son

⁶⁸Chen and Thomas (1997), p. 9.

of the founding President of CITIC, Rong Yiren. CITIC Pacific has purchased stakes in Hong Kong Telecom, Cathy Pacific, and Dragonair.⁶⁹

N-shares are stocks of Chinese firms listed in the New York Stock Exchange. There are also many mutual funds invested in China that are available to investors in the United States. Some are close-end mutual funds and some are open-end mutual funds. Most of the close-end mutual funds are traded on the NYSE. These funds include China Fund, Greater China Fund, EV Marathon Greater China Growth, EV Traditional Greater China Growth, Ivy China Region Fund, SIG Infrastructure Fund, BEA Emerging Markets Infrastructure Fund, and BEA emerging Markets Telecommunication Fund.⁷⁰

*The two stock exchanges in Shanghai and Shenzhen only serve a very limited number of firms. By the end of November 1996, there were only 484 A-share listings on the two exchanges--205 on the Shenzhen exchange and 279 in Shanghai. There were 85 B-listings altogether (43 in Shenzhen and 42 in Shanghai). The limited number of listings reflects the government's cumbersome listing procedures. The regulatory body, the China Securities Regulatory Commission (CSRC), together with other government agencies including the State Planning Commission, jointly set a yearly capital quota to new listings. The quota is then allocated to each province for the issuance of initial public offerings (IPOs). The provincial government then selects companies according to their preferences, usually based on development priority. After making their selections, the provincial authorities submit their recommendations to the CSRC for financial approval. The fact that the government, rather than investment banks or other financial services firms, selects companies to be listed underscores the reality that the decision about which companies may issue shares is based less on company fundamentals than on political concerns, including the central government's desire to strengthen state-owned enterprises in certain strategic industries.*⁷¹

As a result, the two stock exchanges in China primarily serve the SOEs and government development finance. The rapidly growing non-state enterprises, including the township and village enterprises, and private and foreign enterprises find it very difficult to obtain approval from the government for listing. Although those SOEs that are listed in the stock markets are supposed to be among the most profitable ones, these firms, like many other SOEs, are still required to provide social insurance and welfare to their employees, and their accounting methods are not based on international accounting standards. Though shareholder meetings are held annually for listed SOEs, shareholders have relatively little input in company decision-making and firms are generally not very accountable to shareholders.

⁶⁹Lees and Liaw (1996), p. 72.

⁷⁰Lees and Liaw (1996), p. 73.

⁷¹Chen and Thomas (1997), p. 9.

DEVELOPMENT OF BOND MARKETS

Bonds are either issued by governments, enterprises, or financial institutions. In China, bonds include government bonds, corporate bonds, and financial bonds. Government bonds can further be divided into treasury bonds and other government securities. Enterprises shares include those issued by state-owned enterprises and those by non-state enterprises.

After an interruption of 23 years, the government resumed the systematic issuance of treasury bonds in 1981, an event that marked the birth of China's bond market in the reform era. Beginning in 1984, state-owned enterprises were allowed to issue corporate bonds. In 1985, banks were permitted to issue financial bonds.

Although new instruments have been introduced, *development of bond markets has been rather slow*. Issuance of treasury bonds from 1981-91 were through administrative channels rather than markets. In the early years of development, purchase of treasury bonds were mandatory for government and state-owned enterprises employees. The bonds were allocated by the Ministry of Finance to the provincial governments, which in turn, allocated them to local governments and to enterprises under their jurisdiction. The individuals would receive the bonds in bearer form as part of their wage payments. Treasury bonds are issued through mandatory allocations to enterprises and individuals. Government bonds were not allowed to be traded and therefore no secondary market existed. It was only since 1991 that syndication was used for the first time to supplement the administrative allocation system for the sale of state treasury bonds.

Bond markets are also dominated by primary bond markets. Until 1985, securities were officially non-transferable in China. The secondary markets for bonds only started on an experimental basis in 1988. *An important feature of China's secondary security market is its segmented character*. Market development is constrained by an insufficient communications infrastructure and official restrictions on trade between cities or provinces. Any attempts by dealers in cities with a high demand to buy bonds in other cities at lower prices to resell in their own cities were systematically discouraged. Despite recent years of rapid development, market unification (in terms of price formation) is still not complete because of a lack of arbitrage possibilities, and because of the lack of telecommunications and infrastructure which caused problems in delivering securities and cash when trading took place in different cities. The segmented nature of the secondary market can be shown in the significant differences in market prices in different cities and provinces.⁷²

⁷²Mehran *et al* (1996), p. 32.

Table 8.5
Structure of Bond Market in China (1996)

Type of Bonds	Value of Outstanding Bonds (Billion Yuan)	Percentage Share in Total Value of Bonds
Government Bonds	461.99	62.6
Treasury Bonds	436.14	59.1
Government Investment Bonds	25.85	3.5
Financial Bonds Issued by Policy Banks	239.97	32.5
Corporate Bonds	36.00	4.9
Local Enterprises	21.45	2.9
Short-term papers	14.55	2.0
Total	737.96	100

Source: Author's compilation based on data from PBC (1997a), p. 472.

The bond market in China is also dominated by government bonds. Total value of outstanding bonds issued by the government made up 63 percent of the total value of bonds in China at the end of 1996, as shown in Table 8.5. Treasury bonds alone accounted for about 60 percent of the total value of bonds. Financial bonds issued by three policy lending banks made up another one-third of the total value of bonds. Corporate bonds only accounted for less than five percent of the value of bonds.

Treasury bonds finance government deficits, while government investment bonds finance key government projects. Funds collected through issuing financial bonds by policy lending banks are channeled into public projects or strategic sectors. Government bonds and financial bonds together constitute more than 95 percent of the total value of bonds. Therefore, bond markets in China primarily serve the government and the state sector. They collect funds from public or financial institutions and channel them to finance either government consumption or public investment. The bond market as an alternative channel of funds for investment for the corporate sector in China is very limited.

DEVELOPMENT OF MONEY MARKETS

Money markets have been slow to develop in China. The inter-bank market is still the main component of the money market. Inter-bank markets involve lending and borrowing among banks and other financial institutions. This type of activity in the mid-1980s and was intended to promote the horizontal flow of funds across banks. Prior to 1985, it was common practice for banks with surplus funds to hold them, while banks in need of funds had very little opportunity to borrow. This phenomenon resulted from the credit plan under which credit quotas were allocated vertically and horizontal flow of funds was prohibited in order to facilitate the central control of monetary authority.

The organized inter-bank market first appeared in 1985, when the central government tightened its money supply and credit control to control inflation, and some bank branches in cer-

tain regions began to run short of funds for working capital loans. Given this situation, PBC local branches began to organize an inter-bank borrowing and lending among state commercial banks under their jurisdiction. These local markets were spread all over the country. By the end of 1987, inter-bank markets existed in all regions.

Until 1996, the inter-bank market, which is the over-the-counter market, had been quite segmented in nature. First, there were six regional inter-bank markets in the following cities: Shanghai (southeast region), Wuhan (middle-south), Beijing/Tianjin (north), Shenyang (northeast), Xi'an (northwest) and Chongqing (south-west). Lack of adequate telecommunication and other infrastructure make it difficult to mobilize funds across regional markets. These conditions resulted in significant interest rate differentials between these markets. For example, during the period from 1987-1990, the weighted average interest rates ranged from 5.58 percent in Beijing/Tianjin to 6.17 in Shanghai.⁷³

In 1996, the PBC took a major step toward unifying the inter-bank market. In January 1996 the Nationwide Unified Inter-bank Trading Network System, established by the PBC, came into operation on a trial basis. This is largely due to the development of electronic network in the financial system. The nationwide electronic inter-bank system covered more than 500 cities and counties in the country, linking over 5,000 financial institutions, with annual transactions amounting to 10 billion yuan. In May 1996, the PBC lifted interest rate ceilings on inter-bank offered rates. Thus, unified inter-bank interest rates were formed based on market transactions. The inter-bank interest rates are becoming increasingly sensitive to government economic and financial policies and financial market conditions, and are beginning to play the role of signal indicator.⁷⁴

In summary, capital markets in China have been slow in development and play much smaller roles in financing investments than the banking institutions. The level of stock market development is still low compared with developed economies and many other emerging market economies. Stock markets are also segmented, as separated markets are developed in Shanghai and Shenzhen and separate shares are issued for domestic and foreign investors. The markets are also highly volatile, indicating their immaturity in nature. Furthermore, *the stock exchanges are controlled by the central government and primarily serve as a financing vehicle for state-owned enterprises. Bond markets are dominated by government securities and primarily serve the financial need of government and development of strategic sectors. Corporate bonds issues are very small. Thus, capital markets have played a limited role in financing China's development.*

⁷³Dipchand et al 1994, p. 133

⁷⁴PBC (1997b), p. 48

The dominance of the state banks has hindered the development of the capital markets. Government has maintained the control on financial resources by controlling the state banks. Rapid development of capital markets may cause a large shift of funds from the banking sector and thus threaten government control. As a result, the government is reluctant to see a rapid growth of the capital markets.

Another important barrier to the development of capital markets is the serious gaps in the legal system. Since the re-establishment of the stock exchange in Shanghai in 1990 until the end of 1998, China did not have a national securities law that regulated securities transactions. The absence of such a law led to major unfair practices such as insider trading and ramping (market manipulation by a few large investors). ⁷⁵ The passing of the Securities Law of China in January 1999 by the National's People's Congress, China's legislative body, marked a significant step further in the development of the capital market. The new securities law does not only prohibit insider trading and ramping behavior, but also requires disclosure of financial information of firms listed in the stock exchanges. The Securities Law, if implemented, should help increase investor confidence, especially the confidence of foreign investors, and facilitate the expansion of the stock market. However, the law may take a considerable period of time to be fully implemented and enforced.

So far we have discussed almost all types of financial intermediaries--the banking system, non-banking financial institutions, and capital markets--and their role in mobilizing savings and channeling these savings to investment. We have concluded that the financial system, especially the banking system and capital markets in China, have been channeling funds--mostly household savings--to the state sector. While the non-banking financial institutions--mainly the rural and urban credit cooperatives--have been developing rapidly and playing an important role in mobilizing funds for investment in the non-state sector, in particular the township and village enterprises and urban private enterprises, they are informal in nature and much smaller in scale compared with the banking system. As a result, they are not able to meet the growing demand for financing of non-state enterprises.

There is nothing wrong with the financial resources concentrating in the state sector if investment in the state sector is more efficient than those in the non-state sector. A critical question to ask then is: are financial resources efficiently allocated in China? This question will be answered in the following chapter.

⁷⁵Chen and Thomas (1997), pp. 13-14.

9. EFFICIENCY OF INVESTMENT AND GROWTH OF OUTPUT

This chapter is intended to assess and evaluate the efficiency in the allocation of financial resources in China. In particular, we want to look at how efficient various types of financial intermediaries that we discussed in previous chapters are in channeling savings to investment. We will study the relationship between inputs and outputs, especially the relationship between capital channeled through those various financial intermediaries and the corresponding output generated.

Previous chapters verified the proposition that the banking system finances primarily state-owned enterprises, while the non-banking financial institutions serve the township and village enterprises and urban non-state enterprises. By examining the growth of output in state and non-state sectors, and the productivity of capital in different types of enterprises, we shall be able to assess and compare the efficiency of those channels of investment.

This chapter will test the main proposition of this dissertation: financial resources are inefficiently allocated through the financial system in China. It will elaborate the fourth part of the heuristic model presented in Figure 4.1 in Chapter four. The chapter begins with a discussion of the growth of the non-state sector and decline of the state sector, followed by a comparison of financial resources channeled to state vs. non-state sector and the corresponding output generated by respective sectors. Indicators of investment efficiency and consequences of such misallocation of financial resources to long-term economic growth and to the banking sector will be presented and discussed in the last part of the chapter.

THE GROWTH OF THE NON-STATE SECTOR AND THE DECLINE OF THE STATE SECTOR⁷⁶

The Chinese economy consists of the state sector and the non-state sector. The state sector comprises state-owned enterprises. The non-state sector includes enterprises which are collectively-owned (often affiliated and controlled by local governments), privately-owned, and foreign-owned.

The growth of the non-state sector throughout the 1980s was characterized by the growth of township and village enterprises, which are either owned by local communities or governments, or rural households. Since the 1990s, however, other types of non-state enterprises, includ-

⁷⁶This part of the analysis is drawn upon a recent RAND study by the author on the so called "commercial power centers" in China. See Tong (1998).

ing private and individual enterprises, and foreign-invested enterprises, have been growing rapidly in China.

Rise of Township and Village Enterprises

Township and village (TVEs) refer to economic entities located at the township and village level. These were developed initially based on what were formerly known as rural collective-owned enterprises. *These entities have experienced tremendous growth during the last 18 years of reform and are considered the most dynamic part of Chinese economy, contributing significantly to the transition of the Chinese economy to a market economy.*

Table 9.1
Township and Village Enterprises: Number of Enterprises and Employees

Year	Number of Enterprises (In Thousands)	Number of Employees (In Thousands)
1985	12,225	69,790
1986	15,153	79,371
1987	17,502	88,052
1988	18,882	95,455
1989	18,686	93,668
1990	18,504	92,648
1991	19,089	96,091
1992	20,792	105,811
1993	24,529	123,453
1994	24,945	120,182
1995	22,027	128,621
1996	23,363	135,083

Source: China Statistical Yearbook, 1997, p. 399-400.

The term "Township and Village Enterprises" first appeared in 1984 in a government document which announced the breakup of the People's Communes and changed the name from "Commune and Bridge Enterprises" to TVEs. In so doing, the government formally recognized the rural enterprises with private and local joint ownership that succeed the traditional commune and bridge industries. Since then, the TVEs have experienced unprecedented development. As shown in Table 9.1, the total number of TVEs has increased more than 80 percent during the last eleven years, from 12 million in 1985 to 23 million in 1996. The total labor force of enterprises has almost doubled: it rose from 69 million in 1985 to 135 million in 1996.

TVEs appear in almost all sectors of the economy, including agriculture, industry, and services. However, they are not evenly distributed. About 39 percent of TVEs are engaged in whole-sale, retail, food, and other services. One-third of TVEs are industrial enterprises, mostly in labor-intensive and light industries producing consumer goods. Twenty-two percent of TVEs are in the

transportation sector, with another five percent in construction services. Agricultural TVEs only accounted for one percent of all TVEs.⁷⁷

The emergence and development of TVEs are considered one of the most significant achievements in China's economic reform. "Appearing from nowhere," as Deng Xiaoping was reported to have said in 1987, TVEs have become an important player in the Chinese economy.

Emergence of the Private Sector

The private sector of the Chinese economy is comprised of two parts, *getiqiye* or individually-owned enterprises (IOES), which are owned and operated by individuals or families, and *siyinqiye* or private enterprises, which are larger in scale and more formal in production and management. The distinction between the two, according to official Chinese definition, is the size of employment. Privately-owned enterprises with 8 or more employees are considered private enterprises.

The private sector was part of the Chinese economy in the 1950s. However, the assets of private enterprises were almost all confiscated by the state during the Cultural Revolution, because they were considered to be "capitalist." In the later 1970s and early 1980s, many young people were returning to the cities from the countryside, which created problems of dramatic unemployment in the cities. To solve this problem, the government started to allow people to set up their own stores or shops, mostly engaged in retail sales. They are typically called "*getihu*," or "individual entrepreneurs."

Individually-owned enterprises (IOEs) grew rapidly in the 1980s. As Table 9.2 shows, the number of urban individual enterprises increased from 1.8 million in 1981 to 14.5 million in 1988. The number dropped after the 1989 Tiananmen Incident. However, it quickly recovered in 1991 and continued growing in 1992 and 1993. By the end of 1993, the number of urban IOEs had reached 15.8 million. Private enterprises had tremendous expansion during the 1990s; the number of private enterprises doubled during 1989 and 1993.

As a result of rapid growth in the private sector, the government started to pay attention to this part of the economy in the later 1980s. In 1988, the National People's Congress passed legislation which officially recognized the legal status of the private sector as an integral part of the Chinese economy and a "supplement to the socialist economic system of public ownership." At the same time, the "*siyinqiye*," or private enterprises, were officially recognized by the government, and official statistics started to record their numbers. As Table 9.2 shows, private enterprises experienced a major leap forward in 1992-93: the number of private enterprises increased from 139,000 to 184,000, a 32 percent jump. This may reflect the fact that after the famous "south-

⁷⁷Author's calculation based on data from China Statistical Yearbook, 1996, p. 387.

ern tour" of Deng Xiaoping, setting up private business, known as "Xiaohai" ('jump into the sea' in Chinese terms), became a national fashion, especially among intellectuals and former government and SOE employees. A greater proportion of private businesses are located in economically-booming eastern coastal provinces, which are where the businesses first appeared. Guangdong province alone accounted for about a quarter of China's private enterprises in 1992, double the number of the whole of western China.⁷⁸

Table 9.2
Number of Urban Individual and Private Enterprises

Year	Urban Individual-Owned Enterprises (In Thousands)	Private Enterprises (In Thousands)	Employment in Individual and Private Enterprises (In Thousands)
1981	1,827	-	-
1982	2,614	-	-
1983	5,901	-	-
1984	9,329	-	-
1985	11,712	-	4,500
1986	12,111	-	4,830
1987	13,725	-	5,690
1988	14,526	-	6,590
1989	12,471	91	6,480
1990	13,281	98	6,710
1991	14,145	108	7,600
1992	15,339	139	8,380
1993	15,483	184	11,160

Note: Employment data for years before 1990 include individually-owned enterprises only. This table include only individual and private enterprises in urban area. The rural individual and private enterprises are classified as township and village enterprises (TVEs).

Source: Susan Young (1995), Table 1.1, p.6, and China Statistical Yearbook (1997), p. 97.

Individual enterprises are generally small in scale, and mostly engaged in retail sales and other services. The number of industrial IOEs only accounted for one-fifth of total IOEs in 1992, and mostly in light processing industries. Compared to IOEs, private enterprises are often substantially larger in size, and are frequently engaged in international trade, real estate, manufacturing, and even high-tech industries. The highly publicized LAND Group of Mr. Mou Qizhong has been doing business in trade, financial and satellite services. One of the pioneers of private business, the Legend Group, is a major player in the Chinese computer industry.

⁷⁸Chinese Academy of Social Sciences (CASS) 1995, p. 5.

Growth of the Foreign Sector

Foreign investment, especially foreign direct investment started to flow into China in early 1980 when China started to open up its economy for foreign investors. Initial flow of foreign investment were dominated by investment from overseas Chinese, mostly from Hong Kong. However, foreign investment from western countries have increased substantially since 1992. As a result, foreign invested-enterprises (FIEs), including joint ventures and wholly-foreign owned firms, have been growing rapidly in China. As shown in Table 9.3, the total number of FIEs reached 240,000 in 1995, almost three times the number in 1992. Registered capital of FIEs reached US\$ 441 billion, which increased six times since 1992. The total number of employees in FIEs have also more than doubled between 1992 and 1996.

Table 9.3
Foreign-Invested Enterprises: Major Indicators

Year	Number of Enterprises	Registered Capital (Mil.US\$)	Employment (Million Persons)
1992	84,371	67,692	2.21
1993	167,507	245,631	2.88
1994	206,096	312,275	4.06
1995	233,564	399,123	5.13
1996	240,447	441,485	5.40

Source: China Statistical Yearbook, 1993, 1994, 1997

Foreign-invested enterprises have become one of the most dynamic parts of the Chinese economy. Starting from nothing, they are now significant players in Chinese economy in terms of employment, industrial production, and exports. They have also brought management expertise and technology know-how into China and helped transform the Chinese economy from a centrally-planned to a market-oriented one.

FIEs are heavily concentrated in the eastern coastal regions. In Guangdong, the foreign invested sector employed half of the industrial labor force in 1993.⁷⁹ In Fujian in 1992, FIEs accounted for 24 percent of industrial output by value, held 21 percent of capital stock, and were responsible for 42 percent of value of international trade.⁸⁰ Indeed, it is the FIEs which contributed the most to the transformation of previously relatively backward provinces of Guangdong and Fujian to the most advanced provinces in China.

⁷⁹Australian Department of Foreign Affairs and Trade 1995. p. 208.

⁸⁰Australian Department of Foreign Affairs and Trade 1995. p. 212.

The Relative Decline of the State Sector

State-owned enterprises (SOEs) refer to the economic units characterized by state ownership. SOEs can be divided into industrial SOEs and non-industrial SOEs, such as state firms in construction, transportation, and state commercial enterprises. SOEs include enterprises owned by various government ministries, as well as those enterprises owned by the military, the PLA.

Aggregate information about all types of SOEs are not available. Table 9.4 includes general information about industrial SOEs, the major part of the state enterprises. As Table 9.4 shows, there were 113,800 state-owned industrial enterprises in 1996, employing about 43 million people. The number of SOEs had been relatively stable in the ten year period from 1985-96, increasing at an annual growth rate of 2 percent.

Table 9.4
State-Owned Industrial Enterprises: Number of Employment and Enterprises

Year	Number of Enterprises	Employment (In Thousands)
1985	93,700	38,150
1986	96,800	39,550
1987	97,600	40,860
1988	99,100	42,290
1989	102,300	42,730
1990	104,400	43,640
1991	104,700	44,720
1992	103,300	45,210
1993	104,700	44,980
1994	102,200	43,690
1995	118,000	43,970
1996	113,800	42,780

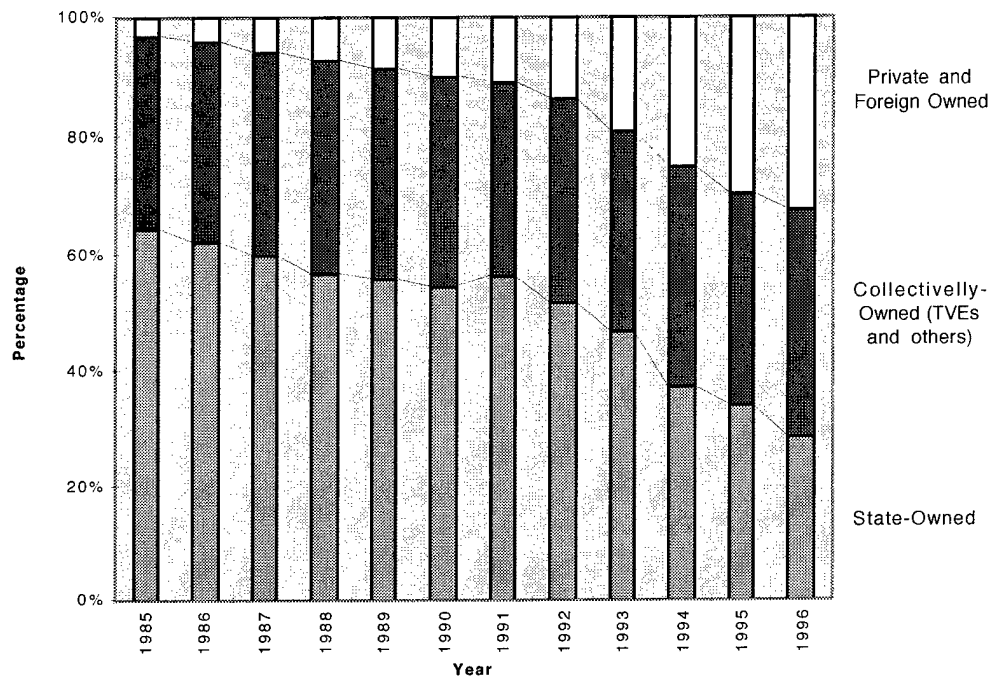
Source: China Statistical Yearbook, 1988, p. 301; 1993, p. 107; and 1997, p. 411-2.

Most industrial SOEs were set up in the 1950s and 1960s, with the assistance of the former Soviet Union. As a result, the industrial structure and administrative system were based on soviet designs, whereby the government directly controls the state enterprises and assumes direct management responsibility over them. Accordingly, the central government has set up various industrial ministries to manage SOEs, which include metallurgical, coal, oil and gas, chemical, telecommunications, electronics and machinery, etc.

The share of the state sector in the Chinese economy has been declining relative to the non-state sector. This decline can be best demonstrated in the change in the share of SOEs in industrial output, as shown in Figure 9.1. In 1985, the Chinese economy was dominated by state-owned enterprises (SOEs), that accounted for two-thirds of total industrial output. By 1996, SOEs' share in industrial

output was merely 28 percent, a decline of more than 30 percentage points. The losing share of SOEs was taken by collectively-owned enterprises (39 percent), individually-owned enterprises (15 percent), and private and foreign firms (17 percent). Among the non-state firms, the most dramatic growth is the village and township enterprises (TVEs), private and individual enterprises (PIEs), and foreign invested enterprises (FIEs).

Figure 9.1 Share in Industrial Output By Ownership, 1985-96

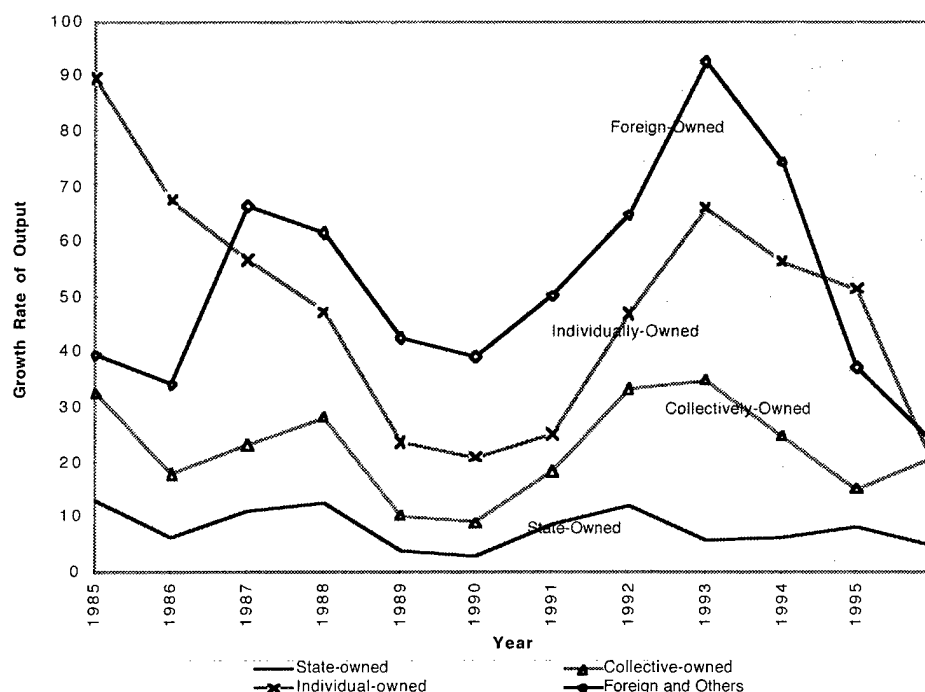


Note: Collectively-owned enterprises mainly consist of township and village enterprises (TVEs). It also includes urban collective enterprises. Other types of enterprises include private and individually-owned enterprises, and foreign-invested enterprises.

Source: China Statistical Yearbook, 1993, p. 412, and 1997, p. 413.

The slower growth of SOEs than that of non-state enterprises was the primary reason for the decline of the state sector share in industrial output. As Figure 9.2 shows, the average real growth rate of industrial output of SOEs was 8.8 percent during 1985-96. During the same period, the average annual real growth rates were 24 percent for collectively-owned enterprises (including the township and village enterprises), 52 percent for individual-owned enterprises, and 56 percent for foreign-invested enterprises and other private enterprises.

Figure 9.2 Growth Rates of Industrial Output by Ownership, 1985-96



Note: Growth rates in this figure are real growth rates.

Source: China Statistical Yearbook 1997, p. 413.

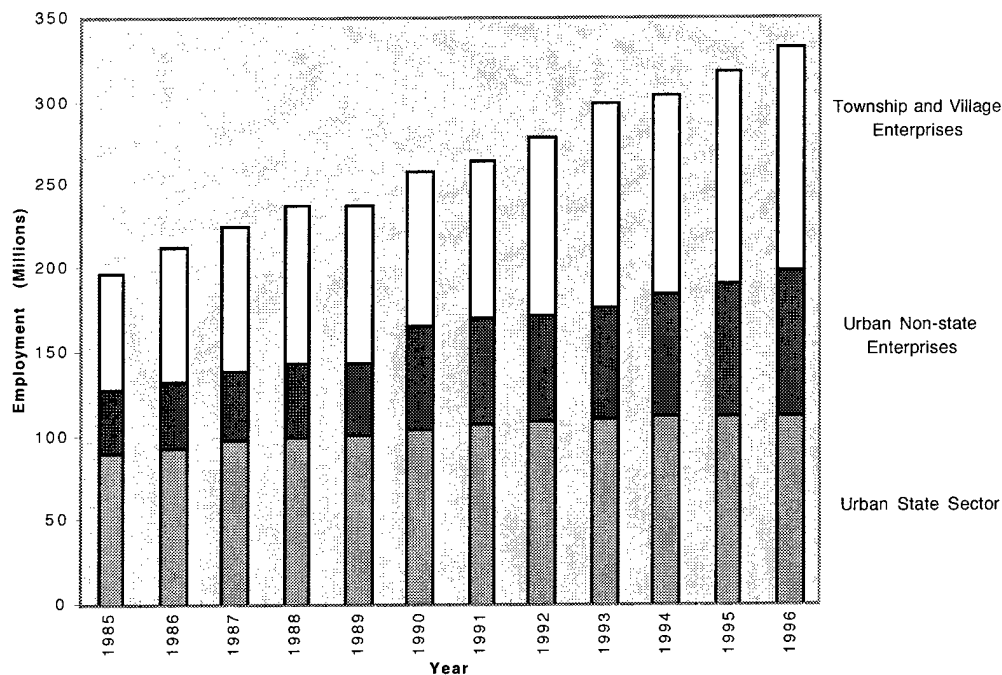
State-owned enterprises have also created less new employment than non-state enterprises. As shown in Figure 9.3, the employment level in the state sector, including governments and state-owned enterprises, had been relatively stagnant during 1985 to 1996. Most of the new non-agriculture jobs are created by urban non-state sectors and TVEs. In fact, total non-agriculture employment increased by 135 million during 1985 to 1996. Half of that growth was generated by TVEs, and another 35 percent was created by urban non-state enterprises, including individual, private and foreign-invested enterprises, as well as urban collective enterprises. Only 16 percent of new jobs were created by the state sector. The share of the state sector in total non-agriculture employment also declined from 45 percent in 1985 to one-third in 1996.

In contrast, employment in TVEs has been rising rapidly during the last decade. The number of employees in TVEs reached 135 million in 1996, accounting for 40 percent of total non-agriculture employment, and 27 percent of employment in rural areas. Thus, TVEs have played a major role in China's industrialization: it created massive industrial employment within the rural area and reduced the flow of rural surplus labor to urban cities.

The urban private sector, including private and individual enterprises, employed a total of 23 million people, comprising 12 percent of total urban employment. Most of the employment in

individual enterprises were in retail sales and service sectors. Foreign-invested enterprises (FIEs) employed a total of 5.4 million people in 1996, accounting for about 3 percent of urban employment. The employment in FIEs has been growing rapidly since 1991, along with the dramatic inflow of foreign investment. Employment increased by twofold in the five years between 1991 to 1996. Compared with SOEs, the foreign invested sector provided an entirely new range of increasingly popular employment opportunities, especially for well-educated and highly skilled young people. Jobs in FIEs are seen as having better pay, as well as more competition and challenge, but less job security.

Figure 9.3 Non-Agriculture Employment by Sectors, 1985-96



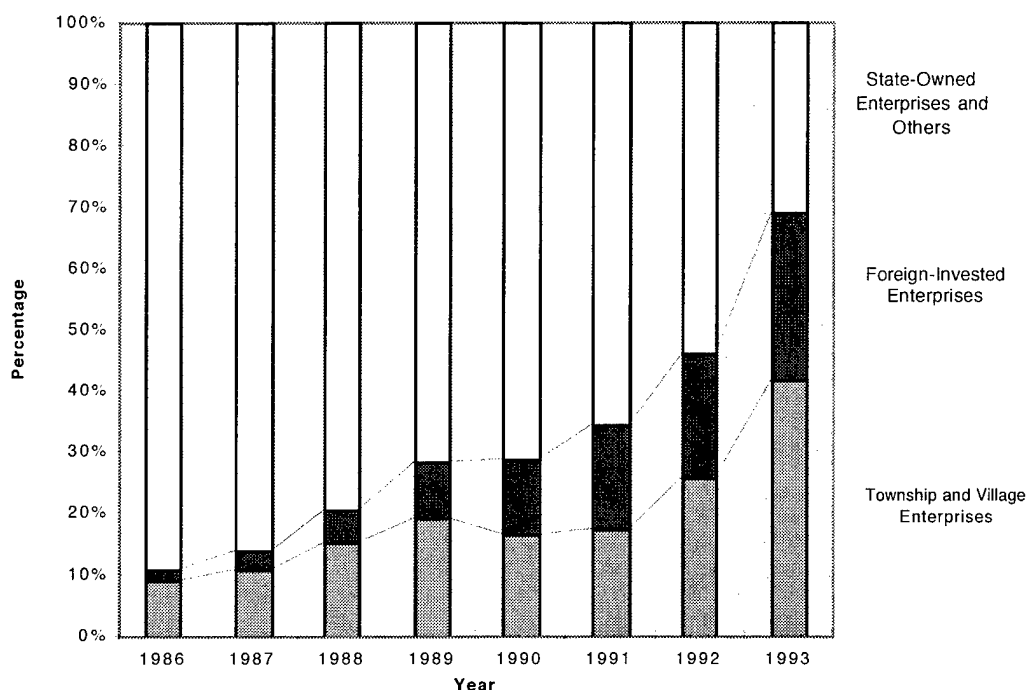
Note: Total non-agriculture employment includes total urban employment plus employment in township and village enterprises.

Source: China Statistical Yearbook 1997, p. 96.

The decline of the state sector in the economy can also be demonstrated in the declining share of SOEs in exports. Relative to FIEs and TVEs, share in exports by SOEs had been declining rapidly, as Figure 9.5 shows. In 1986, SOEs accounted for more than 85 percents of total exports, the largest and dominant player in the Chinese exports. However, by 1993, the SOE sector only

accounted for less than one-third of total exports, and it is no longer the largest exporter as a group, a position taken by village and township enterprises.

Figure 9.4 Exports by Type of Enterprises, 1986-93



Source: Lardy (1995), Table 6, p.1075, ; Yan (1995), Table II, p. 10.

TVEs have contributed more to the growth of total exports than SOEs. Between 1986 to 1993, the value of exports from TVEs grew at an annual rate of 45 percent in nominal terms, almost three times the growth rate of total exports. Exports of TVEs are mostly labor-intensive consumer goods. In fact, consumer manufactures and textiles together accounted for more than 50 percent of total TVEs' exports in 1993. Other major export products include handicrafts and artwork, food, chemical, and machinery products. In 1991, TVEs contributed 77 percent of total garment exports, 38 percent of consumer manufactures, 25 percent of textile exports, 31 percent of chemical products and 24 percent of machinery exports.⁸¹

While the FIEs' share in the economy is still small compared with SOEs and TVEs in terms of employment and output, they are definitely one of the most significant contributors to Chinese

⁸¹Yan (1995), p. 11.

exports. In 1996, the total exports by FIEs reached \$61 billion, accounting for 40 percent of total Chinese exports.⁸²

The Development of the Non-State Sectors and the Company Law

While the non-state enterprises, especially the township and village enterprises, emerged in China during the mid-1980s, the development of the legal framework to accommodate the new types of ownership has not been developed until the early 1990s. On December 29, 1993, the National People's Congress passed the Company Law of China. The new legislation, effective July 1, 1994, provided for the first time a firm legal foundation for the establishment and operation of companies in China.

Promulgation of China's Company Law marks an important step in the country's transformation into a market economy. Before the reform policies began in 1978, there was no non-state sectors in China's planned economy, and state-owned enterprises, managed as administrative units of the government's planning agency, had no share-holders and no independent legal status. As a result, there was no need for such a law for companies.

However, the emergence and rapid development of non-state enterprises, including the TVEs, private and foreign enterprises, and the reform of the state-owned enterprises, call for a law to define the legal status of these various types of enterprises and to protect the interests of investors, both domestic and foreign. The Company Law is expected to achieve several goals. First, China must create a legal framework for transforming state-owned enterprises into independent commercial entities with modern enterprise governance structure, second, further expansion of capital markets, especially Shanghai and Shenzhen Stock Exchanges, requires a clear framework to define property rights and regulate enterprise selling shares; third, China needs a better legal foundation to attract foreign investment, both direct and portfolio investment, to sustain China's growth in the coming years; fourth, China needs a legal framework that will allow the non-state sectors, including the township and villages enterprises, and private companies, to develop further.⁸³

The Company Law addresses all these needs to a great extent by providing for the establishment of two basic types of shareholding companies: a limited liability company and a

⁸²China Statistical Yearbook 1997, p. 603-4. Separate data for exports by TVEs and SOEs are not available for the years after 1993. However, we would expect a continued decline of share of SOEs in total exports due to the deterioration of their competitiveness. Thus, SOEs' share in total exports should be below 30 percent in 1996.

⁸³Torbert (1994), pp. 48-49.

joint stock company. These two are similar to the corporate forms found in the civil law of many developed countries.⁸⁴

In summary, economic reform has led to rapid growth of non-state sectors in the economy, especially the growth of township and village enterprises, and later emergence of private, and foreign sectors. In contrast, the state sector has been growing rather slower than the non-state sector: it created much less new jobs, and contributed much less in growth of output and export. As a result, the state sector has ceased to be the largest player in the real sectors: in employment, in industrial output, and in exports.

This dramatic shift in the structure in the real sectors of the economy has important policy messages, especially for the way financial resources are allocated by the financial sector. As we have demonstrated in the previous chapters, *the financial sector is still dominated by state banks, which primarily serve the state-owned enterprises. But SOEs are producing a decreasing share in output. This mismatch in financial and real sectors indicates that financial resources are misallocated.*

FINANCIAL SECTOR AND REAL SECTOR: EFFICIENCY OF INVESTMENT

To examine the efficiency of investment, we will first look at how financial resources are allocated to state vs. non-state sector through financial institutions. We will then relate the financial input to and output produced by these sectors to compare the productivity of capital used in different sectors of the Chinese economy.

Distribution of Financial Resources by Sector

As Table 9.5 shows, about 80 percent of loans extended by all financial institutions went to finance SOEs. Working capital loans to state industrial, commercial, and construction enterprises accounted for half of total loans, and fixed asset loans comprised another 20 percent. Non-state sectors, including agriculture, township and village enterprises, urban collective and individual enterprises, as well as foreign-invested enterprises, received less than one-fifth of total loans all together.

⁸⁴Limited liability companies can be established when there are from two to fifty shareholders, except that an authorized government department may be the sole investor, in which case the entity is a wholly state-owned limited liability company. Joint stock companies may, but not required to, sell shares to the public. These shares may or may not be listed in Shanghai and Shenzhen Stock Exchanges. See Xinhua News Agency, "The Company Law of the People's Republic of China", December 30, 1993, in FBIS, *China*, 94-017, January 26, 1994, pp. 26-28.

Table 9.5
Distribution of Loans of Financial Institutions (1996)⁸⁵

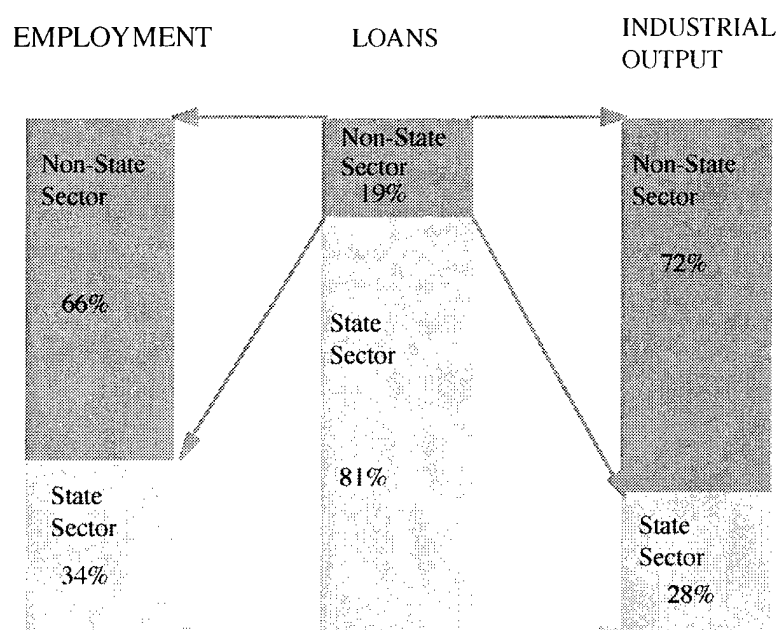
Recipient of Loans	Share in Total Loans (%)
State-sector	81.4
Working capital loans to SOEs	47.3
Loans for Fixed assets	19.9
Other loans	14.2
Non-state sector	18.6
Agriculture	11.5
Urban and township collective enterprises	4.3
Individual enterprises	0.5
Foreign-invested enterprises	2.3
Total (billion yuan)	100
	(6,115.3)

Source: Author's calculation based on data from PBC (1997a), p. 465.

The mismatch between financial and real sectors is shown in Figure 9.5. The state sector absorbed 80 of financial resources provided through financial institutions, but produced less than 30 percent of total industrial output, and employed only one-third of total non-agricultural labor forces in China in 1996. Chapter 8 has shown that the capital markets are controlled by the government and primarily function as the financing vehicles for the state sector. Thus, financial resources are channeled through state banks and capital markets to inefficient state-owned enterprises. Non-state enterprises made a major contribution in China's growth, but received a disproportionate share of financial resources.

⁸⁵In compiling this data, the author assumes that fixed asset loans and others loans all go to the state sector, based on the fact that most of these loans are extended by the state banks. It may slightly overestimate the amount of loans going to the state sector.

Figure 9.5 Mismatch Between Financial and Real Sectors: Loans, Employment, and Industrial Output



Note: Employment refers to non-agriculture employment, which include urban employment plus employment at township and village enterprises.

Sources: Figure 9.1, Figure 9.3, and Table 9.5.

Efficiency of Investment by Sector

The first indicator of investment efficiency is capital-output ratio, i.e., the amount of capital used in producing each unit of output. As Table 9.6 shows, the average capital-to-output ratio for SOEs was almost twice that of non-state enterprises. It is more than twice the capital-to-output ratio of collectively-owned enterprises which comprise mainly TVEs, and significantly higher than that of foreign-invested enterprises.

Table 9.6
Capital-Output Ratio of Industrial State and Non-State Enterprises (1996)⁸⁶

Type of Enterprises	Capital-Output Ratio
State-Owned Enterprises	1.92
Non-State Enterprises	1.05
Collective-Owned Enterprises	0.82
Private and Individual Enterprises	0.99
Foreign-Invested Enterprises	1.25

Note: Collectively-owned enterprises include township and village enterprises and urban collectively-owned enterprises. Capital-output is calculated by dividing gross industrial output by total assets.

Source: Author's calculation based on data from China Statistical Yearbook (1997), p. 424-5.

The higher capital-to-output ratio in SOEs could be because state-owned enterprises are concentrated in capital-intensive industries. But disaggregative data suggest otherwise. Table 9.7 compares capital-to-output ratio in SOEs vs. non-state enterprises in six industries with different capital intensity in 1996. Food processing and textiles are generally less capital-intensive than machinery, chemical, automotive, and electronics. *In all these six industries, SOEs had much higher capital-to-output ratio than non-state enterprises. The World Bank did a study in 1995 and found that 37 out of 39 industrial sectors SOEs were less-capital efficient than the non-state enterprises.*⁸⁷

Table 9.7
Capital-to-Output Ratio of State vs. Non-state Enterprises by Industry (1996)

Industry	Total Average	State-Owned Enterprises	Non-State Enterprises
Food Processing	0.88	1.16	0.64
Textile	1.22	1.68	0.99
Machinery	1.54	2.29	1.13
Chemical	1.35	1.67	1.01
Automotive	1.49	1.82	1.16
Electronics	1.20	1.87	1.00

Note: Data covers only industrial enterprises with independent accounting.

Source: Author's calculation based on data from China Statistical Yearbook 1997, p. 424-8.

The second indicator in inefficiency in investment is the excess capacity in industrial sectors. As part of the industrial policy, governments have been supporting the development of the so-called strategic or "pillar" industries through government-invested projects or government-directed loans. Provincial and local governments have also competed among each other in investing in projects which they considered to be profitable. Such practices have created overlap construction

⁸⁶Data in this table only covers industrial enterprises with independent accounting.

⁸⁷World Bank (1995).

across cities and provinces and generated enormous excess capacity in many industries. This is especially evident in consumer electronics, automotive, and machinery industries, as shown in Table 9.8. According to a 1995 industrial census, *capacity utilization rates were less than 60 percent for more than 900 major industrial products*.⁸⁸

Table 9.8
Capacity Utilization in China's Industrial Sectors (1995-97)

Industries	Capacity Utilization Rate (%)
Automotive	
Car	64.9
Truck	35.9
Motorcycle	61.6
Machinery	
Machine Tool	46.2
Diesel Engine	56.6
Bicycle	54.5
Consumer Electronics	
Television	46.1
VCR	40.3
Pickup Camera	12.3
Film	22.1
Refrigerator	50.4
Laundry Washer	43.4
Air Conditioner	33.5

Source: China Statistical Yearbook (1997), p. 455.

The third indicator of inefficiency in investment has to do with the high debt-to-asset ratio in state-owned enterprises. The government has supported SOEs in difficulties through state bank preferential credit for so long that SOEs' debts are accumulating and many of them are not able to repay even the interest. The debt-to-asset ratio of SOEs is on the rise. In 1980, this ratio for industrial SOEs was 18.8 percent, about half or 40 percent of what one would expected among firms in a market economy. In 1993, this debt-to-asset ratio rose to 67.5 percent. The debt-to-asset ratios for medium-sized and small industrial SOEs were 74.23 and 73.25, respectively, and the ratio for SOEs in light industry was 75.54 percent. A survey of 20,000 SOEs in 1994 showed that *the debt-to-asset ratio was 79 percent*.⁸⁹

High debt-to-asset ratio in SOEs implies that many of these firms are insolvent, and rely heavily on bank loans and government subsidies to cover their operating costs, including employees' wage bill. In fact, the proportion of SOEs operating in deficit has been rising rapidly dur-

⁸⁸Lardy (1998), p. 81.

⁸⁹Wu (1995), pp. 189-90.

ing recent years. In 1994, 34.3 percent of the SOEs within the state-budget suffered losses, up 3.6 percent over the previous year.⁹⁰ From January to September of 1996, 31,400 out of 68,800 state-run industrial enterprises, or 45.6 percent of SOEs surveyed were in the red, an increase of 45.7 percent over the same period in 1995. With the exception of Tibet, 17 out of country's 29 provinces suffered losses, a 10 percent increase over the last year. Meanwhile, the total profit of SOEs fell by 75.8 percent over the previous year.⁹¹

INVESTMENT INEFFICIENCY AND THE WEAKNESS OF THE BANKING SECTOR

Low efficiency of investment in the state sector has also affected the strength of the banking sector. The strength of the banking system can generally be measured by four indicators: asset quality and loan loss reserves held; capital to asset ratio, profitability, and the margins between lending and deposits rates.⁹² All of these measures confirm the view that 20 years of bank lending to the inefficient state sector has left China's financial system, especially four state commercial banks, in a weak position

First, the banking system has accumulated a large stock of non-performing assets as a result of lending to inefficient SOEs., and reserves held against these bad assets are far from adequate. According to statements of high officials, including the governor of the People's Bank of China, Dai Xianglong, the share of non-performing loans in the portfolio of the four state commercial banks was 25 percent by the end of 1997, an increase of 5 percentage points since the end of 1994.⁹³ The ratio of non-performing loans in China is substantially higher than it was in Thailand or Indonesia before the Asian financial crisis, as shown in Table 9.9. China also has a very low level of loan loss provisions, which means that it is impossible to write off these bad assets using the banks' own loan loss reserves.

⁹⁰Jiang (1995), p. 92.

⁹¹People's Daily (1996), pp. 1-2

⁹²Lardy (1998a), p. 92

⁹³Lardy (1998a), p. 83.

Table 9.9
Loan loss reserves and non-performing loans (1990-97)

Country	Non-performing loans as a percentage of total loans	Loan loss reserves as a percentage of total loans
China	25.0	1.0
Hong Kong	3.1	2.2
Taiwan	2.6	1.1
Indonesia	11.2	2.6
Thailand	7.6	1.7
Mexico	14.8	3.1
Japan	3.3	1.0
United States	3.3	1.0

Source: People's Bank of China official estimate; Goldstein and Turner (1996).

Second, interest rate margins for the Chinese banks are low because of government control on these rates. Government regulations on interest rates is to ensure the low costs of financing SOEs and public projects, and to ensure the monopoly profits of the state banks have been passed on from households to users of funds. Consequently, interest spreads of state banks have been very low, and for some periods the spreads were even negligible, as shown in Table 9.10.

Table 9.10
Interest Spread of State Commercial Banks (One-year Maturity)

Date	Rates for one-year working capital loans	One-year time deposit rates	Spread
1989.2.1	11.34	11.34	0.00
1990.3.21	10.08	10.08	0.00
1991.8.21	8.64	7.56	1.08
1992	8.64	7.56	1.08
1993.5.15	9.36	9.18	0.18
1996.5.01	10.98	9.18	1.80

Source: PBC (1997a), p. 494.

The control of spreads implies that Chinese state banks earned limited profits from interests, despite protection from competition. As Table 9.11 shows, the net interest margins⁹⁴ of China's state banks are much lower than that of US commercial banks.

⁹⁴Net interest margin equals interest income earned from loans minus interest payments to deposits.

Table 9.11.
Net Interest Margin as A Proportion of Total Assets, China State Commercial Banks and US Commercial Banks
(In Percentage)

Year	ICBC	BOC	CCB	Year	US commercial banks
1990	2.13	0.79	1.49	1988	4.02
1991	2.11	0.77	1.28	1989	4.12
1992	1.83	0.66	1.32	1990	4.07

Note: ICBC: Industrial and Commercial Bank of China; BOC: Bank of China; CCB: China Construction Bank.

Source: Xie (1995), p. 38.

Third, the profitability of state banks has also fallen substantially during the last 10 years. Net profit as a ratio of total assets dropped from 1.2 in 1987 to 0.2 in 1996. The average return on assets of China's state banks was only a quarter of that of US commercial banks, as Table 9.12. shows.

Table 9.12.
Average Return on Assets of China's State Commercial banks: An International Comparison

Year	Net profit/ assets (%)
1987	1.2
1990	0.7
1993	0.3
1996	0.2
International Comparison	
United States	0.8
Japan	0.1
Germany	0.2
Hong Kong	1.7
Singapore	1.1
Taiwan	0.7
Korea	0.6

Note: * Average 1990-94 for United States, Japan, Singapore, Taiwan, and Korea; for Germany, 1995; for Hong Kong, 1991-94.

Source: Girardin (1997); PBC (1997a); Goldstein and Turner (1996)

The deterioration of profitability of state commercial banks is primarily due to the financial difficulties of their major debtor--the SOEs. Economic reform in the real sector seems to have been particularly adverse to state banks, as their major clients--the SOEs--have been facing increasing competition from dynamic, rapidly growing non-state firms, which are increasingly taking market share from the SOEs. As a result, an increasing percentage of SOEs are operating in

losses and are unable to service their debt. However, state commercial banks are required by the government to still provide loans to support the employees of loss-making SOEs. Such practices have not only affected the profitability of state banks, but also affected their asset quality, as a large part of loans to SOEs are non-performing.

Fourth, the low profitability and rapid growth of credit at the direction of government has led to a declining capital base relative to assets. As Table 9.13. shows, capital-to-asset ratios of the four state commercial banks have been declining rapidly in the last decade. In 1985, the average ratio for the four banks was close to 10 percent. However, it fell slightly under the international standard of 8 percent set by the Basle Accord in 1987 and went further down to 4.5 percent in 1993. Even this figure seems to over-estimate the adequacy of the state banks' capital base, as it is supporting many other loans which are not shown in the balance sheet. Such activities include loans and investment by the trust and investment corporations, as well as the finance and lease companies that affiliated with them.

Table 9.13.
Low and Declining Capital-to-Asset Ratio of China's State Commercial Banks (In Percentage)

State Commercial Bank	1989	1990	1991	1992	1993	1994	1995	1996
ICBC	6.5	5.9	5.7	4.9	4.4	3.3	2.9	2.6
ABC	6.3	5.4	4.7	4.0	3.0	3.6	3.3	2.9
BOC	5.4	5.0	4.8	4.5	5.2	4.4	4.7	4.9
CCB	7.3	6.2	5.1	4.5	3.3	2.8	2.3	2.1

Source: World Bank (1997); Author's calculation based on data from PBC (1997a).

Moreover, these banks carry assets at values which do not reflect the quality of loans and which, if written off, would significantly reduce their capital, and lower the capital-to-asset ratio further. Non-performing loans are valued as high as four times that of the banks' capital. Writing off these loans using their own capital would leave these banks technically insolvent. However, as China's state banks are not truly commercial banks (they act like government agencies), the capacity of state banks to bear losses is not a function of capital; rather, it depends on the readiness of the central government to bear the losses. Therefore, their credibility will not be weakened by the low quality of assets or small capital base, as long as the government is willing to bail them out in times of liquidity crises.

EFFICACY IN INVESTMENT AND SUSTAINABLE ECONOMIC GROWTH

As we have demonstrated, financial resources have been inefficiently utilized in China. But despite this inefficiency in use of capital, China has been able to sustain an average growth rate of about 10 percent in the last 20 years. What are the sources of growth in China, and will this growth rate be sustainable in the future, or even in the next 5 to 10 years if allocation of capital has not been improved significantly?

While China's growth rate has made it one of the fastest growing economies in the world, most of its growth can be explained simply by "capital accumulation supported by an extraordinarily high savings rate that has come to depend on China's thrifty households," according to a World Bank study (1996b). As Table 9.14 shows, real GDP had grown at an average annual rate of 10.2 percent during the period 1985 to 1994. According to this study, two-thirds of the growth was the result of factor accumulation, mostly capital accumulation supported by high household savings rates. Less important, but significant nonetheless, have been increasing labor force participation rates.

Table 9.14
Source of Economic Growth in China, 1985-94

Source of Growth	1985-94	1985-89	1990-94
GDP Growth	10.2	9.9	10.5
Contributed by			
Factor accumulation	6.6	7.1	6.1
Agricultural reallocation	1.0	1.3	0.6
Ownership reallocation	0.4	0.0	0.9
TFP growth	2.2	1.4	2.9

Source: World Bank (1996b), p. 14.

Only one third of that growth was the result of productivity improvements, and a significant part of productivity growth was from more efficient use of labor. The movement of labor from agriculture to industry and to a lesser extent services contributed about 1 percentage point to aggregate GDP growth in the last decade. Another 0.4 of a percentage point was the result of resource allocation between state and non-state enterprises. Total factor productivity grew at only 2.4 percent a year, a rate comparable to those in other East Asian newly industrialized countries.

Inefficient use of capital will affect the growth of productivity and thus affect the long-run economic growth of an economy. An example was the decline of the Soviet economy in the 1980s. Under the central planned Soviet system, growth mainly relied on accumulation of capital, the so-called extensive growth, as compared with intensive growth relying on efficient use of inputs.

Virtually all investments were directed by the government, and the only bank--the Gosbank--essentially functioned as cashier in the economy. Capital was not used efficiently, as suggested by high and rising capital output ratios, and slow and even actually negative growth of total factor productivity.⁹⁵ This type of growth was not sustainable because marginal return of capital would go down eventually as more capital was used.

Growth of the Newly Industrialized Countries (NICs) in Asia can also be characterized as extensive-style growth, according to the studies of Kim and Lau (1994) and Young (1994a and 1994b). In their influential study on sources of growth in the East Asian Tigers, Kim and Lau concluded that "the hypothesis that there has been no technical progress during the post-war period cannot be rejected for the four East Asian newly industrialized countries." Young's studies also shows that the tremendous growth of output in these economies since the late 1960s had been largely due to rapid accumulation of capital, including human and physical capital, and productivity growth had been slow. The result of his study is shown in Table 9.14. The results of these studies indicate that inputs have not been efficiently utilized in production in these economies. In fact, excess investment had been a problem in many Asian economies involved in the financial crisis, including South Korea, Thailand, and Indonesia, and had generated enormous excess capacity in these economies.⁹⁶ Governments in these countries had long been supporting the export sector by directing bank loans to the sector at the expense of other sectors. The recent Asian financial crisis demonstrated the danger of the extensive growth model.

⁹⁵Total factor productivity growth of the Soviet economy was 0.1 percent between 1970-79, and -0.2 percent between 1980-87. See Easterly and Fisher (1995).

⁹⁶For detailed study on the factors leading to financial crisis East Asia, see a recent RAND study report by Lowell, Neu, and Tong (1998).

Table 9.15.
Economic Growth and Productivity in East Asia

Country	Growth Rate of GDP (%)	Share of Capital and Labor in GDP Growth (%)	TFP Growth (%)
Hong Kong (1966-91)	7.3	5.0	2.3
Singapore (1970-91)	8.5	9.5	-1.0
South Korea (1966-90)	8.8	7.0	1.8
Taiwan (1966-90)	10.2	8.1	2.1
China (1985-94)	10.2	8.0	2.2

Source: Young (1994), and World Bank (1996b).

China's growth record in the last decade has been similar to that of East Asian countries since the 1960s. Capital accumulation played the major role in the rapid growth of the economy since the 1980s, although productivity growth has been higher than those in East Asian countries. Continuing reliance on injection of capital to sustain high growth rates may not be feasible in the future, as the savings rate may decline. The rapidly aging population resulting from the one-child policy has dramatically increased China's dependence ratio (ratio of non-working age to working age populations), casting a subdued light on the future savings rates. Moreover, increasing consumption on housing and other consumer durables means households may save less of a proportion of their income than they are currently doing. If the savings rate declines, capital accumulation cannot be expected to generate the same growth impetus that it did in the past. Future growth has to rely on more efficient use of capital. That requires an efficient financial sector that can channel investments to their most productive uses and ensure efficient use of investments. However, financial sector reform cannot proceed without significant reform in the state-owned enterprises. An efficient and well developed financial sector, and an efficient state sector that operates under market forces and does not rely on government financial support, are crucial for China's long-term growth, a growth with intensive style.

In summary, financial resources have been inefficiently allocated in China through the financial system, as funds are concentrated in the inefficient state sector. Non-state enterprises used investment more efficiently than SOEs, but it is difficult for them to gain access to financial resources that are controlled by state commercial banks. State banks' lending to loss-making SOEs has also put the banks in a precarious position, as indicated by low quality of assets, inadequate capital base, low interest margins and

declining profitability. China's rapid growth in the past was mostly due to rapid capital accumulation supported by extraordinary growth of household savings, rather than improvement in productivity. Sustaining future economic growth will depend increasingly on financial reform and enterprise reforms that will lead to improved efficiency in the allocation of and use of capital.

While the central government leadership has recognized the urgency of financial reform, the progress has been slow. In principle, the financial reform that would lead to a redirection of loans from state to non-state enterprises could lead to more efficient use of resources and more sustainable growth. As non-state sectors offers higher rates of returns to capital than the state-owned enterprises, capital ought to flow automatically to the non-state enterprises until returns to capital are equalized among all the sectors of the economy if the financial system is operating under commercial criteria and not controlled by the government. However, this is not what has been happening in China. A critical question to ask then is: why the government continues to control the financial system and direct financial resources to loss-making SOEs, and why the financial sector reform has been slow in progress and significantly lagged the real sector reform? Answers to this question lies on the social functions that the government has relied on SOEs to support, which is the topic of the next chapter.

10. INVESTMENT EFFICIENCY AND SOCIAL ROLES OF STATE ENTERPRISES

This chapter will explore the reasons why financial sector reform and state-owned enterprise reform, which are the prerequisites to improving the efficiency in the allocation and use of capital, have been delayed. It will test the proposition that the delay is primarily due to the government's heavy reliance on SOEs to finance and operate the nation's social insurance and welfare system.

State-owned enterprises in China, like their counterparts in formerly centrally-planned economies, play a major role in providing social services to their employees. While SOEs are obliged to provide such services, which will certainly increase their costs of production, most non-state enterprises do not have such obligations. It is therefore important to know if the financial conditions of SOEs would have been different had they not been providing social services. Will those loss-making SOEs still be insolvent, or will they be able to break-even or even be profitable? The answer to this question has important policy implications.

This chapter examines the social services that SOEs provide in the context of the nation's social welfare system, estimates the costs of providing these services, and considers how these costs have affected the profitability of SOEs. Finally, alternative ways of providing and financing social services are described, and attention is paid to the relationship between financial reform, SOE reform and reform of the social welfare system.

SOCIAL SERVICES PROVIDED BY SOES

SOEs in China assume important social functions and provide important social services. These functions or services include maintaining excess level of employment, providing directly to employees housing, education, health care services, and pension benefits.

Maintaining Urban Employment

State owned firms have long been required to employ redundant workers as part of the government's ill-founded strategy to maintain a high level of employment in urban areas. Although the State-Owned Enterprise Law, promulgated in 1988, gave SOE managers the right to hire and fire people, this right is seldom executed. As a result, many SOEs still have a large number of excess employees. A World Bank survey of 142 enterprises in 1994 found that 60 percent of firms had redundant workers exceeding 10 percent of their labor force, and one-third of firms reported labor redundancy exceeding 20 percent. Although the estimates for labor redundancy covers a broad range, the consensus seems to be from about one-fifth to one-quarter.

⁹⁷ In 1996, State-owned enterprises have a total employment of 77 million. *If we assume 20-25 percent of labor redundancy rate, 15 to 20 million total personnel in SOEs are redundant., the wage payments to these excess employees alone costed SOEs 94 to 126 billion yuan,* ⁹⁸ and these costs did not yet include the costs of providing social services to the redundant personnel.

The state sector, including the state-owned enterprises and government agencies and institutions, is still the largest employer in the urban area. It employed a total of 112 million people in 1996, accounting for 57 percent of total urban employment in the country. State-owned enterprises alone comprised 40 percent of total urban employment, as shown in Table 10.1. If the excess employees were laid off from SOEs, the total number of urban unemployed persons would increase from 5.5 million to 20 or 25 million, and the urban unemployment rate would rise from the current 3 percent to as high as 10 to 12.5 percent. Such a level of unemployment may cause social turmoil and threaten stability. This is the reason why the government has been hesitant to let SOEs lay off their redundant personnel. Another important reason is that social insurance and welfare benefits in China, including health care, pension, housing, and child education, are closely associated with a worker's employment. A worker laid off by his employer no longer has access to such benefits, including housing. Such a system makes the reduction of redundant personnel extremely difficult.

Table 10.1
Structure of Urban Employment in China (1996) (In Millions and Percent)

Sector	Employment (millions)	Employment (%)
State sector	112.44	56.7
Government	35.45	17.9
SOEs	76.99	38.8
Non-state sector	85.71	43.3
Urban collective enterprises	30.16	15.2
Private and foreign	55.55	28.1
Total urban	198.15	100

Note: Number of employees in governments include those in the institutions affiliated with governments.

Source: China Statistical Yearbook (1997). p. 93 and p. 102.

Social Insurance and Welfare

The social insurance and welfare services that SOEs provide to their employees and families include medical care, pension, education, public welfare facilities such as sports and

⁹⁷Lardy (1998a), p. 50.

⁹⁸The cost of maintaining excess level of employment is calculated by using the estimated number of redundant employees multiplied by the average annual wage of an employee in the state sector (6,280 yuan in 1996).

recreational centers, various subsidies to employees including funeral expenses, low income subsidies, as well as subsidies for family planning and heating in winter, for example. We will first look at aggregate spending by SOEs on social insurance and welfare, and then discuss specifically on pension and health care spending.

Table 10.2
Social Insurance and Welfare Spending by Sector (1996)

Type of Sector and Enterprises	Social Insurance and Welfare Spending (Billion Yuan)	Social Insurance and Welfare Spending (%)
State sector	229.66	84.2
SOEs	154.80	56.8
Government	74.67	27.4
Non-state sector	43.06	15.8
Urban collective enterprises	31.89	11.7
Private and Foreign Enterprises	11.17	4.1
Total	272.53	100

Note: Share of SOEs in welfare spending is computed by the author based on the share of SOEs in total employees in the state sector.

Source: Author's calculation based on data from China Statistical Yearbook (1997), p. 746.

SOEs funded a large part of social insurance and welfare spending in China. As shown in Table 10.2, *SOEs' spending on social insurance and welfare made up 57 percent of total spending in the country in 1996*. The non-state sector contributed about 16 percent of total funds for social insurance, of which 12 percent are contributed by urban collective-owned enterprises⁹⁹. Private and individual enterprises provide only about 4 percent of total social insurance and welfare funds. Two-thirds of social welfare spending by SOEs went to pay for pensions for retirees, and about 17 percent went to finance medical care, as shown in Table 10.3. These spending are discussed separately in the following sections.

⁹⁹Urban collective enterprises are enterprises in urban area that are in collective-ownership, i.e., owned by employees or municipalities. Most of those collective enterprises were set up before the reform started, and they are also required by the government to provide social insurance and welfare services to their employees, though their benefits are often not as good as those of SOEs. Urban collective enterprises share many of the problems of the SOEs, such as excess employment and declining profit. These enterprises have becoming less significant in the urban economy as a result of the rapid growth of more dynamic and efficient urban private sector.

Table 10.3
Structure of Social Insurance and Welfare Spending in SOEs

Type of Spending	Social Insurance and Welfare Spending (Billion Yuan)	As an percentage of total wages of SOE employees ¹⁰⁰
Medical care	25.99	5.7
Public welfare facilities	12.38	2.7
Subsidies to individual employees	9.44	2.1
Pension and welfare for retirees	103.70	22.6
Others	3.09	0.67
Total	154.80	33.7

Source: Author's calculation based on data from China Statistical Yearbook (1997). p. 102, 121, and p. 747-9,

Pensions

SOEs also support a large portion of retirees of the country through their pension plan. Before 1986, SOEs had to pay all the pension funds directly to their retirees and no pension plan existed. As a result, no pension funds were accumulated. In 1986, a unified social pension fund was set up, and SOEs were required to contribute at a certain premium rate, usually 18-20 percent of the total wage bill. This has reduced the financial burden of pensions on SOEs, but the burden remains heavy because of the obligations of SOEs to pay for current retirees.

Table 10.4
Share of Spending on Pension by Sector

Sector or Enterprises	Spending on Pension and Welfare for Retirees (Billion Yuan)	Share in total pension and welfare funds (%)
State sector	153.78	84.6
SOEs	103.98	57.2
Government	49.81	27.4
Non-state sector	27.99	15.4
Urban collective enterprises	23.08	12.7
Private and foreign enterprises	4.90	2.7
Total	181.78	100

Source: Author's calculation based on data from China Statistical Yearbook (1997), p. 749.

The state sector supplied 85 percent of pension funds of the whole country in 1996, in which SOEs provided 57 percent of the funds. Government budget only supplied a quarter of the pension funds.

¹⁰⁰Total wages of SOEs are calculated based on the total wages of the state sector and the share of SOE employees in total employees of the state sector.

The non-state sector provided the remaining 15 percent of the pension for retirees, as shown in Table 10.4.

The rapid aging of the population has substantially increased the costs of financing pensions for retirees. As Table 10.5 shows, the dependence ratio, measured as the ratio of current workers to number of retirees, has been declining rapidly in the last 20 years. In 1978, about 30 workers supported one retiree; however, the ratio has dropped to less than 5 workers for one retiree in 1996. With the existence of the "one-child policy," the dependence ratio is expected to continue to rise in the future.

SOEs have a heavier burden of pension payments than private and foreign enterprises, which are often new and generally have a younger workforce. As Table 10.5 shows, the ratio of current workers to retirees for private and foreign employees is almost double that of SOEs. Most private and foreign firms are not included in the pension plan.

Table 10.5.
Ratio of Current Employees to Retirees by Sector

Year	Total Average	State-Owned Enterprises	Urban and Township Collectives	Private and Foreign Enterprises
1978	30.3	26.2	68.3	-
1980	12.8	12.6	13.6	-
1985	7.5	7.7	7.1	8.8
1986	7.1	7.2	6.9	9.2
1987	6.7	6.8	6.5	12.0
1988	6.4	6.5	6.2	12.1
1989	6.2	6.2	6.2	13.2
1990	6.1	6.0	6.3	14.9
1991	6.0	5.8	6.2	17.3
1992	5.7	5.5	5.9	16.6
1993	5.4	5.1	5.7	13.1
1994	5.1	4.8	5.2	12.5
1995	4.8	4.6	5.0	12.2
1996	4.6	5.9	4.8	11.6

Source: China Statistical Yearbook 1997, p. 750.

Among the SOEs, the burden of pension differs among sectors and among regions; as do rates of contribution to the pension plan. For traditional industries, such as the mining industry, the rate of contribution is as high as 25 percent; while for some newly emerged industries, such as banking and civil aviation, the contribution rate is less than 10 percent.¹⁰¹ The burden of pension

¹⁰¹Hu (1996), p. 127.

is usually much higher for old industrial cities in northeast China than in southern coastal cities and special economic zones.

Medical Care

The employment-based medical care system was set up in the 1950s. Under this system, SOEs are required to pay all the medical expenses of their workers and staffs, and 50 percent of the medical costs of employees' family members. There is no such requirement for collectively-owned enterprises, and private and foreign enterprises.

SOEs usually set up their own hospitals and clinics to provide services to their employees and families. *Nationwide, there are 110,000 medical institutions operated by SOEs, employing some 1.4 million medical staff and accounting for one-third of the country's total number of medical personnel. The population that these medical institutions are serving account for about one-fifth of the total population in China.* Normally, the prices of medical services provided by these SOE-run institutions are lower than other hospitals in the society because they are often subsidized by the enterprises to which they are affiliated.

Housing

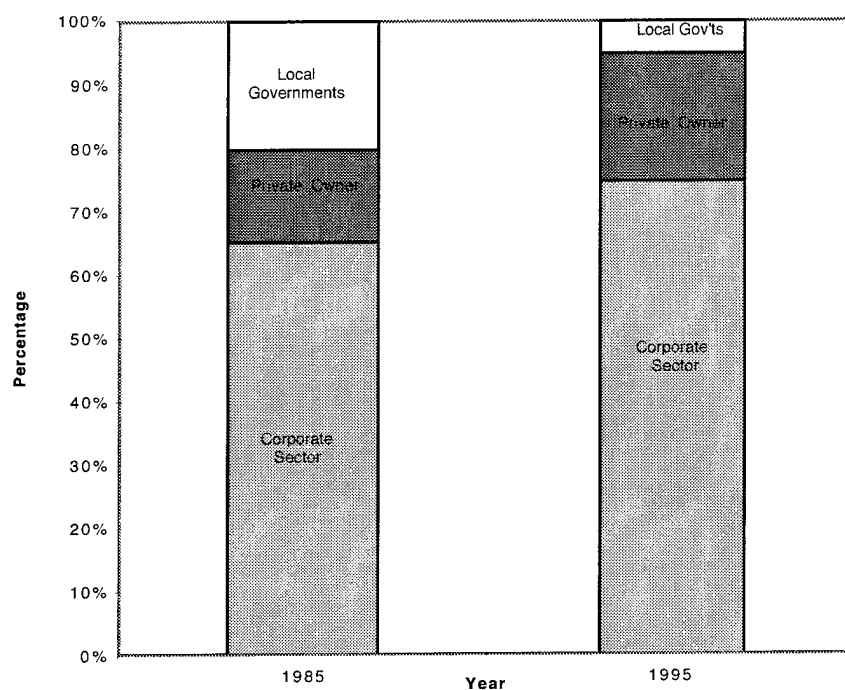
Under the welfare-housing system, SOEs and government organizations are responsible for providing housing for their workers and employees--from construction and housing distribution, to repairs and maintenance. The employment-based housing system not only increased the operating costs of SOEs, but also hindered SOE restructuring as it lowered labor mobility across cities and regions.

Urban housing in China has been predominantly public since the Communist Party took power in 1949. Before the 1980s, public housing construction was facilitated primarily through the appropriation by the central government of funds that were then allocated to local governments and state-owned enterprises to build urban rental units. Enterprises and local governments then allocated housing units to their employees. However, the situation of housing financing has changed since the 1980s, as funds from the central government have been significantly reduced as a result of decentralization of fiscal revenue. The central government's share of housing investment declined from over 90 percent in 1979 to 16 percent in 1988 and was expected to continue to decline. Much of the burden of financing housing investment has fallen onto state-owned enterprises. In 1988, SOEs provided 52 percent of total urban housing investment out of their retained earnings, other "extra-budgetary funds, or depreciation allowance. Individual households pro-

vided 20 percent, and local government provide 6 percent of the housing funds. The rest (6 percent) was picked up by collective enterprises.¹⁰²

In 1995, most SOEs and some urban collective enterprises, owned and managed about 75 percent of total urban housing. Private housing accounted for only 20 percent of the total urban housing. City housing bureaus owned the remaining 5 percent.¹⁰³ The proportion of housing owned by enterprises had also increased by about 10 percentage points from 1985 to 1995, while the share of local governments had decreased by 15 percentage points. Shares of private housing had also increased about 5 percentage points during 1985 to 1995.

Figure 10.1 Urban Housing Ownership in China, 1985 and 1995



Source: World Bank 1996a, p. 62.

The financial burden of residential housing for employees is rather heavy for SOEs. Housing built by SOEs has been made available for their employees in nominal rents, and these rents have been a fraction of what is needed to cover the costs of construction, depreciation, and maintenance. As a result, SOEs have been providing housing subsidies to their employees, which may have substantially increased SOEs' labor costs. Data on housing subsidies for employees and their share in total labor costs of SOEs are not readily available. However, we are able to make an estimate based on the data on annual spending on housing by urban households.

¹⁰²World Bank (1992), p. 7.

¹⁰³World Bank (1996).

In 1996, average annual expenditure per capita on housing by urban households is 124.14 yuan, which is only 2.56 percent of per capita average income. According to Yang and Wang (1992),¹⁰⁴ housing expenditure comprised of 27.3 percent of an household income in 1990 if subsidies are included in the calculation.¹⁰⁵ If we assume the ratio was 30 percent for the year 1996 as nominal rents for employees' housing has been raised in recent years, housing subsidies provided by state enterprises would be 27.44 percent of annual household income, or 1,329 yuan per person.¹⁰⁶ As the average size of household is 3.2 persons per household, annual housing subsidies per household was 4,524 yuan. Given that the average number of employees per household was 1.86 persons, housing subsidies per employee would be 2, 287 yuan in 1996. There were 74.04 million employees in SOEs, and average annual wage of SOE employees was 6,280 yuan.¹⁰⁷ So the total costs of housing subsidies borne by SOEs were 169.33 billion yuan, accounting for 36.4 percent of total wage payments.

Education

Often SOEs have to set up and run their own education institutions, especially primary and secondary schools, to provide education for the children of their employees. *Nationwide, SOEs operated a total of 18,000 primary and secondary schools, employing 600,000 teachers and administrative personnel in 1995.*¹⁰⁸

Although schools run by enterprises offer a convenience for the education of the children of their employees, it is not without costs. Just as with hospitals and other facilities that are operated by the SOEs, expenditure on construction of schools, as well as wages and welfare payments for school teachers and staffs, significantly increased the total labor costs of the SOEs. Even with investment in capital construction excluded, their annual operating costs exceeded 3 billion yuan, which is about 1 percent of cash wages paid to employees.¹⁰⁹ Total costs of education to SOEs were 1.8 percent of total wage payments, or 8.37 billion yuan in 1996.¹¹⁰

In sum, SOEs' spending on social services, including health care, pension, education, housing, and other subsidies and welfare facilities amounted to 72 percent of total wage payments, and 42 percent of total

¹⁰⁴Yang and Wang (1992), p. 3

¹⁰⁵The share of housing expenditure in annual income are normally between 10 to 20 percent in other developing countries and above 30 percent in developed countries. Yang and Wang (1992), p. 3.

¹⁰⁶Average annual income per capita in urban households is 4,844.78 yuan. China Statistical Yearbook (1997), p.294.

¹⁰⁷ China Statistical Yearbook (1997), p. 102, p. 122.

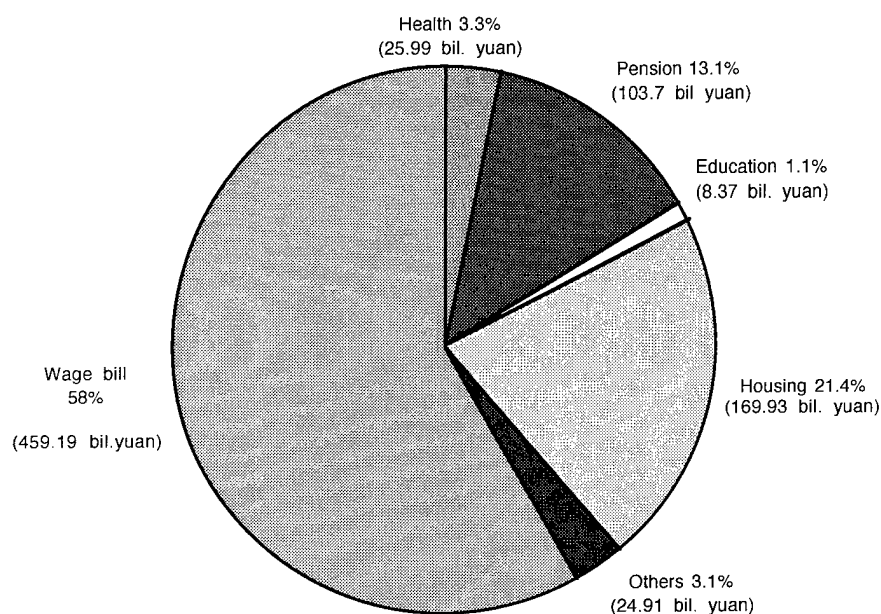
¹⁰⁸Hu (1996), p. 128.

¹⁰⁹Hu (1996), p. 128.

¹¹⁰World Bank (1996b), p. 20.

labor costs, as shown in Figure 10.2. It is estimated that SOEs spent a total of 333 billion yuan in provision of these services in 1996, an equivalent of about 5 percent of GDP in that year.

Figure 10.2 Social Sectors Expenditures By State-Owned Enterprises (In Billion Yuan and Percentage of Total Labor Costs), 1996



Source: Table 10.3; author's estimates in previous sections.

CONSEQUENCES OF PROVIDING SOCIAL SERVICES BY SOES

Providing social services directly by SOEs has affected their efficiency in production. First, it set conflicting goals for SOEs: producing commercial as well as social output. On the one hand, SOEs are supposed to operate under market forces and produce goods and services that meet market demand. Therefore, they should be profit maximizers. On the other hand, SOEs are required to keep redundant personnel, and provide social services to their employees. The latter pre-empt financial and managerial resources that would have been put into production of commercial output.

Second, providing social services directly through SOEs may not be the most efficient way to provide them. Social services provided by SOEs are subsidized by the company, which encourages overuse. Medical care is a typical example. Family members of SOE employees are often

extensive users of such services, which created the phenomenon of the so-called "small family pharmacy." The growth of medical costs of SOEs has been striking in recent years.¹¹¹

Housing is another example. Enterprises construct residential apartments and then allocate them to their employees at low rents, which have comprised less than one percent of an urban resident's annual salary or living expense. The low rents have failed to cover the costs of housing construction, depreciation, maintenance, management, etc., that have been at least ten times as high. Low rents have led to the shortage of supply of residential housing. The per capita living space occupied has been low, and there were more than 4 million families, or 10 percent of the urban population needing housing in 1993. Fifteen percent of urban families were poorly housed, with per capita space of less than 2 square meters. In addition, there are about two million newly married couples each year waiting for housing accommodations.¹¹²

Allocation of housing among employees has also been a problem for SOEs. The bureaucratic distribution process encouraged corruption and use of power and influence to obtain housing by individuals. Meanwhile, the more or less uniformly distributed values of housing, when added to the cash wages to arrive at a measure of real income including cash and in-kind payments, contributed to the relative lack of dispersion in remuneration to reflect differences in marginal products among employees.

Employment-based housing and the social welfare system also hindered labor mobility, thus affecting the efficiency in the allocation of labor resources. Being tied to hard-fetched low rent apartments and health and welfare benefits, employees in SOEs have been extremely reluctant to move, especially among cities and regions, and from state to non-state sectors which normally do not provide housing and social welfare benefits to their employees. This is reflected in China's minimal labor mobility--below 1 percent of the non-agriculture labor force.¹¹³

In sum, the government has been heavily relied on SOEs to provide urban employment, housing, education, health care, and pension funds to urban population: SOEs provide 40 percent of jobs in urban area, 57 percent of pension funds, and three quarters of urban housing. Medical institutions that belongs to SOEs serves one-fifth of China's total population. Such a reliance has forced the government to continue directing bank loans to loss-making SOEs, thus delaying the financial and state enterprise reform.

Provision of social services has substantially increased the total costs of labor in SOEs. Health care, pension, and welfare spending amount to a third of total wage payments of SOEs, while housing subsidies alone account for 36 percent of the wage bill. Education expenditure comprised about 2 percent of wages.

¹¹¹Hu (1995), p. 127.

¹¹²Chen (1998), p. 44-5.

¹¹³Chen (1998), p. 46.

Altogether, expenditure on health care, pension, housing, education, and other welfare and subsidies by state owned enterprises amounted to 332.5 billion yuan, comprised of 72 percent of total wage payments of SOEs, or 42 percent of their total labor costs

Opportunity Costs of SOE Provision of Social Services

Would the costs of financing social welfare be lower had these services not been directly provided by SOEs but by other means, such as other private or public organizations? In other words, what is the opportunity costs of providing social services through SOEs? This question is important because if other means of providing services are more cost-effective, SOEs should be freed from providing such services and focus on commercial activities.

Detailed data are not available to conduct a comparison between the costs of providing social services through SOEs vs. other means. However, since the 1990s there has been increasing numbers of SOE employees transferred to the private and foreign sector, which usually do not provide housing and other in-kind benefits to their employees. Employees working in private and foreign sectors have to look for outside housing and purchase other services including medical care and child schooling provided by other organizations, including private housing and medical and educational services provided by public hospitals and schools. Suppose a SOE employee quit his job and found one in a private or foreign enterprise, he therefore would lose his housing and other social welfare benefits. The fact that he is willing to give up such benefits and work for the private or foreign sectors means he must receive this compensation in his in-cash salary. The difference between his wage in SOEs and that in other sectors would be able to serve as a proxy for opportunity costs of providing such services by SOEs.¹¹⁴

In 1996, the average annual wage per worker in industrial SOEs was 6,139 yuan. In the same year, the average wage for firms in "other types of ownership" which include private, individual and foreign enterprises was 7,988 yuan.¹¹⁵ The difference was 1,849 yuan, or 30 percent of the wage bill in SOEs. Therefore, *the costs of providing social services through alternative means was lower than half of the costs of providing social services in SOEs, which stood as high as 72 percent of their wage bill, indicating high inefficiency in using SOEs to provide such services.*

¹¹⁴One caveat of this approach is that the wage difference may partly reflect differences in labor productivity. However, the level of education and skills of employees in private and foreign enterprises should be comparable with that of SOEs employees, as most employees in private and foreign sectors are former SOE employees. It is also difficult to compare labor productivity because employees in SOEs have less workload than that in non-state enterprises because of a high level of excess employment on the state sector.

¹¹⁵Author's calculation based on data from China Statistical Yearbook 1997, p. 102, p. 126,

Costs of Provision of Social Services and Profitability of SOEs

In the previous chapter we have shown that almost half of SOEs have been running in losses. Would these firms have been making a profit if they did not have to provide social services to their employees? What portion of losses are due to the provision of social services, and what portion is due to inefficiency in operations? By comparing the costs of providing these services, and the total losses of loss-making SOEs, we should have a more accurate picture about the profitability of SOEs.

Unfortunately, we do not have the data on the losses of all the loss-making SOEs. We do, however, have the data for the losses of industrial SOEs. Total losses incurred by loss-making industrial SOEs with independent accounting systems was 79.1 billion yuan in 1996.¹¹⁶ But this number does not include implicit financial subsidies from the banking sector. According to the World Bank estimates, financial subsidies to all the state-owned enterprises--in the form of low interest rate loans and unpaid principal and interest--came to 1.7 percent of GDP in 1994. The ratio for 1996 should be more or less the same as that in 1994, as the banking system continues to extend working capital loans to loss-making SOEs despite reforms in the banking system.

Total number of employees in loss-making industrial SOEs accounted for 41 percent of total number of employees in all the industrial SOEs,¹¹⁷ and 25 percent of employees in all the state-owned enterprises. If we assume that the amount of financial subsidies are proportional to the number of employees in SOEs, total implicit financial subsidies to loss-making SOEs would be 0.42 percent of GDP, or 28.7 billion yuan in 1996. The total losses of loss-making SOEs, which include explicit losses and implicit subsidies, amounted to 107.8 billion yuan in 1996.

There were all together 42.77 million employees in industrial SOEs in 1996.¹¹⁸ Total wage bills of these workers was 262.6 billion yuan.¹¹⁹ If we apply our estimates on costs of social expenditure presented in Figure 10.2, which is 42 percent of total labor costs, or 72 percent of total wage bill, total costs of social expenditure of industrial SOEs in 1996 was 189.1 billion yuan. Total wage cost of maintaining redundant workers was 65.5 billion yuan, if we assume 25 percent redundancy rate.

Assuming that social service costs is proportional to the number of employees, these costs to loss-making SOEs would be 77.53 billion yuan. Total costs of wages for redundant workers

¹¹⁶China Statistical Yearbook 1997, p. 439. Total industrial SOEs with independent accounting systems accounted for 76 percent of the total numbers of all industrial SOEs, but made up 96 percent of the total industrial output in 1996.

¹¹⁷World Bank (1996b), p. 15.

¹¹⁸China Statistical Yearbook (1997), p. 102. Industrial SOEs include those in the industries of mining and quarrying, manufacturing, and public utility enterprises.

¹¹⁹Author's calculation based on data from China Statistical Yearbook 1997, p. 108, and p. 126.

would be 26.86 billion yuan. Together, the costs of maintaining excess employees and providing social services amounted to 104.39 billion yuan in 1996 in all the loss-making industrial SOEs. Therefore, the costs of social services and excess employees in loss-making SOEs were roughly equal to the total losses incurred in these enterprises (including the implicit financial subsidies from the banking sector).

However, this comparison does not take into account the fact that the social benefits that SOEs provide to their employees is partly to subsidize the low cash wages that SOEs pay to their workers. For private and foreign enterprises which usually do not provide housing and other in-kind welfare benefits to their employees, they often have to offer higher cash salary. Therefore, the total wage bill of SOEs would be higher than the current wage bill if they did not provide social benefits to their workers. We assume that SOEs have to pay the same amount of cash salary to their employees as the private and foreign enterprises do when SOEs are not providing social benefits. Thus the total wage bill of SOEs would first decrease by 25 percent due to the lay-off of redundant labor, then increase by 30 percent to compensate for social welfare services. The net savings from separating social service functions from SOEs were 80.2 billion in 1996, as shown in Table 10.6. It was able to cover the total losses of SOEs (not include the implicit subsidies from the banks, i.e., the loss figure appeared in official statistics), and was about three quarters of total losses incurred in loss-making SOEs if bank subsidies were included.

This result has important policy implications. Since the expenditure on social services and redundant employees were roughly able to cover the explicit financial losses of SOEs, and three quarters of total losses, a large portion of the loss-making SOEs would have been able to break-even or even profitable if they were released of responsibilities of social services provisions.

Table 10.6.

Loss-Making Industrial SOEs: Social Services Expenditures and Financial Losses (1996)

Categories of Social Expenditures or Losses by Industrial SOEs	Social Expenditure and Losses by Loss-Making Industrial SOEs (billion yuan)
Wage bill for excess employees	26.9
Social service exp. for excess employees	19.4
Social service exp. for other employees	58.1
Total Social Expenditures	104.4
Minus	
Increase in wage bill	24.2
Total Savings from Separating Social Services	80.2
Loss incurred by industrial SOEs	79.1
Implicit subsidies by banks	28.7
Total Losses	107.8

Source: Figure 10.2.; World Bank (1996b), p. 17-18; China Statistical Yearbook (1997), p. 42, p. 102, p. 122, p. 439.

The above analysis, however, treats the loss-making industrial SOEs as a homogeneous group. But the enterprises running financial losses are not all the same. The magnitude of losses may differ among different industries, different sizes of firms, and different regions. However, financial data on losses of SOEs that breaks down to these level of details are not available. This requires further research and data collection efforts and is beyond the scope of this study..

In summary, the main reason why the government continues to control the financial system and direct financial resources to loss-making state-owned enterprises is because of the government's heavy reliance on SOEs to finance and operate the nation's social insurance and welfare system.

State-owned enterprises help maintain a high level of employment in urban employment by employing redundant workers, and provide housing, education, health care, and pension funds to urban population: SOEs provide 40 percent of jobs in urban area, 57 percent of pension funds, and three quarters of urban housing. Medical institutions that belong to SOEs serves one-fifth of China's total population. Such a reliance has forced the government to continue directing bank loans to loss-making SOEs, thus delaying the financial and state enterprise reform.

The social service burden that SOEs carry have significantly increased their labor costs. Health care, pension, and welfare spending amount to a third of total wage payments of SOEs, while housing subsidies alone account for 36 percent of the wage bill. Education expenditure comprised about 2 percent of wages. Altogether, expenditure on health care, pension, housing,

education, and other welfare and subsidies by state owned enterprises amounted to 332.5 billion yuan, comprised of 72 percent of total wage payments of SOEs, or 42 percent of their total labor costs.

The costs of financing those social activities were able to cover the explicit losses that the loss-making SOEs as a whole has incurred, and three quarters of total losses if implicit financial subsidies from the banking system were included. Separation of social functions from SOEs would significantly improve the profitability of the state enterprise sector.

SOEs directly providing social services to their employees is also inefficient because it has distracted resources that would have been used in producing commercial output, and it led to inefficient use of services and shortage of supply. It also seems to be more costly than other alternative ways of providing social services, such as by private or local governments.

The lack of an alternative social welfare system affected the pace of SOE reform and reform of the banking and financial system. Loss-making SOEs are not allowed to be divested as they support a large number of urban workers with housing and other benefits. Banks are not able to operate under commercial criteria as they are controlled by the government to finance SOEs' social service provisions. A successful social welfare reform would be able to free up a large amount of financial resources from SOEs and, if they are channeled into the non-state sector, would be able to significantly improve the efficiency in resource allocation, and sustain a higher growth rate. Reform of social welfare system, therefore, is the pre-requirement of the other two parts of the economic reform--the banking reform and state enterprises restructuring--that are needed to improve the efficiency in allocation and utilization of capital in China.

11. CONCLUSIONS AND IMPLICATIONS

A sound financial sector will be crucial for sustaining rapid growth in China. Theories of financial development and empirical research findings tend to agree that well-functioning financial systems are able to stimulate and sustain economic growth because they help mobilize savings and allocate them to the highest return use. In China, however, the financial sector does not play these roles well. Although the development of the non-state sector has improved efficiency of production, the government continues to control the financial sector and direct the bulk of financial resources toward state enterprises. The government controlled banking system exists side by side with an increasingly free market for goods, a rapidly developing non-state sector, and a thriving non-bank financial sector. The mismatch between the reform of the financial sector and that of the real sector has led to inefficiency in allocation and use of capital, affected the quality of bank assets, complicated macroeconomic management, and slowed down the structural transformation of the economy. However, reform in the financial sector has been delayed due to the difficulties in reform of state-owned enterprises, which has been hindered by their provision of social services and lack of a national social welfare system.

CHANGING STRUCTURE OF SOURCE OF INVESTMENT FUNDS

Empirical Findings

Economic reform, especially the decentralization of fiscal revenue has changed the structure of the sources of funding for investment in China. The government has lost its key position as the main saver and direct provider of funds for investment in the economy, while rural and urban household savings have had extraordinary growth and become major sources of investment funds.

Foreign investment, especially foreign direct investment, played an important role in financing China's development since 1990s. China has been among the largest recipient of foreign direct investment in the world in the last several years. However, the amount of actual foreign investment was much smaller than that of contracted. The fact that less than half of the contracted foreign investment was actually invested in China in the following three years reflects that foreign investors are still cautious to pour large amount of investment in initially due to the lack of confidence on China's market. It may also be because that barriers to foreign investment in are high in China.

Policy Implications

This change has important implications for capital formation in China. As household savings have become the principle sources of investment, sustaining high rate of savings has been and will continue to be crucial to achieve high growth in the economy. However, it is warned that China's savings rate could declining in the future due to rapidly aging population and changed consuming behavior, leading to a lower level of capital accumulation and thus a lower level of economic growth. To maintain high level of household savings, the role of banks in mobilizing saving becomes increasingly important. Banks need to provide attractive rate of returns to savers. Yet the People's Bank's control on interest rates meant that the average rate of return on household savings has been relatively low. Liberalization of interest rates, including decontrol of deposit rates, therefore, should be on the financial reform agenda for the near and medium term.

Foreign direct investment will continue to be important for China's growth in the next century. China need to further improve its investment environment, open its market and lower the barriers for foreign investment in order to shorten the lag between contracted and foreign investment.

ALLOCATION OF CAPITAL: THE ROLE OF THE FINANCIAL SECTOR

Empirical Findings

The second role of the an efficient financial sector is intermediation, i.e., channeling savings to investment and ensure efficient allocation of capital. In China, state banks, especially the four state commercial banks, dominate the banking sector in China. They are the major absorbers of household savings, but they are highly controlled by the government and their funds are mostly invested in state-owned enterprises and public projects in preferential terms. Non-state enterprises only receive a small part of credit from state banks. Establishment of policy banks relieved a partial burden of state commercial banks in policy lending, but state commercial banks are still required to finance loss-making SOEs.

Non-state commercial banks are small compared with state commercial banks. Funds of these banks are mostly from SOEs and local governments, and their loans also mainly go to finance SOEs and local investment. Only one bank is a truly private bank, which serves exclusively non-state enterprises.

Foreign banks channel foreign funds from their affiliated banks to invest in foreign-invested enterprises in China. Domestic currency business are highly restricted for foreign banks so they are not yet able to mobilize large scale domestic savings. The share of foreign banks in the banking system is still very small, and foreign banks play a limited role in capital formation in

foreign-invested enterprises which are mainly financed by foreign direct investment. The entry of foreign banks to China is still highly regulated and their business scope are restricted so they constitute only very limited competition to the domestic banking system, which is dominated by the state banks.

The development of non-banking financial institutions (NBFIs) is one of the major characteristics of financial development in China since economic reform. The rural and urban credit co-operatives have developed rapidly and have played significant roles in mobilizing rural and urban household and business savings and channeling them to investment in non-state enterprises. RCCs and UCCs are the main sources of financing for village and township enterprises, and urban private and individuals. Trust and investment corporations have facilitated flow of funds among commercial banks and enterprises, and have been an important source for regional development.

However, NBFIs are small in scale compared with the banking system dominated by state commercial banks. Their total assets are only one-fifth of the total assets of all financial institutions. These institutions, especially rural and urban credit cooperatives, are informal in nature and lack modern banking skills. As a result, they have not been able to meet the growing demand for financial services from the rural and urban non-state enterprises.

Capital markets in China have been slow in development and play much smaller roles in financing investments than the banking institutions. The level of stock market development is still low compared with developed economies and many other emerging market economies. Stock markets are also segmented, as separate markets are developed in Shanghai and Shenzhen and separate shares are issued for domestic and foreign investors. Furthermore, the stock exchanges are controlled by the central government and primarily serve as a financing vehicle for state-owned enterprises. Bond markets are dominated by government securities and primarily serve the financial need of government and development of strategic sectors. Corporate bonds issues are very small. Thus, capital markets have played a limited role in financing China's development.

Financial resources have been inefficiently allocated in China through the state-control banking system, as funds are concentrated in the inefficient state sector. Non-state enterprises used investment more efficiently than SOEs, but it is difficult for them to gain access to financial resources that are controlled by state commercial banks. State banks' lending to loss-making SOEs has also put the banks in a precarious position, as indicated by low quality of assets, inadequate capital base, low interest margins and declining profitability. China's rapid growth in the past was mostly due to rapid capital accumulation supported by extraordinary growth of household savings, rather than improvement in productivity.

Policy Implications

Efficiency in allocation and use of capital in China needs to be improved in order to sustaining future economic growth. First, financial resources need to be reallocated from the state sector to non-state sectors which offer higher rate of returns to capital. Second, improving efficiency in allocation of capital requires significant reform in the financial sector.

Access of financial resources by non-state firms should be improved significantly, and resources should be shifted from the state sector to the non-state sector. Reallocating financial resources from SOEs to non-state enterprises would be able to create more employment opportunities, generate more exports, and sustain higher growth rates. It should be easier for laid off employees from the state sector to find jobs in the non-state sector without retraining, as skills required in the SOEs and non-state enterprises are often similar. Non-state enterprises, especially those TVEs, are short of skilled labor, and they often welcome former SOE employees that have better skills than their own employees. Transferring labor from SOEs to the non-state sector may also be a longer term solution to unemployment problems than investing in public infrastructure projects.

As the four state commercial banks control most of the resources in the financial sector, transforming them to genuine commercial financial institutions is an urgent task and a necessary condition for achieving efficient allocation of financial resources. These banks need to be transformed from passive financing agents of government-identified projects to proactive financial intermediates serving a creditworthy client base and ensuring the efficient use of depositors' funds. It is therefore crucial to completely separate the policy lending functions from the state commercial banks and transfer them to policy banks. This objective cannot be achieved immediately, however. It may take a few years before policy banks have the resources to shoulder all policy lending. In the interim, state commercial banks should be given increasing autonomy in allocating loans, and should let commercial criteria and market forces guide more of the allocation of financial resources.

To improve the efficiency of the state banks, competition in the banking sector also needs to be strengthened. The sector should be deregulated gradually to allow the entry of new commercial banks, and should be gradually opened up for foreign competition. Entry of foreign banks will be able to bring in modern banking skills and thus strengthen the banking system. However, the problems of non-performing assets need to be solved first to ensure a level playing field before the sector is opened up to full-blown competition from new domestic and foreign banks.

Non-bank financial institutions, especially the rural and urban cooperatives, have played a major role in financing the growth of the TVEs and urban private sector. However, they need to be formalized and upgraded to urban and rural cooperative banks to serve a larger client base.

The size of the capital markets need to be further expanded. Expanding capital markets will be able to increase the proportion of direct financing, and thus reduce reliance of the corporate sector on the banking system and lower their debt-to equity ratio. Capital markets also provide an effective way of monitoring firms' operation by share-holders while avoiding the cozy relationship between banks and enterprises.

Expansion of capital market requires reduction of government control on their development. The efficiency, stability, and transparency of capital markets need to be improved. With the elimination of the credit plan, quotas for shares and bond issues should be gradually phased out. In addition, the stock exchanges should not become another financing tool for government industrial policy, which limits access to capital markets to only SOEs and strategic sectors. Firms in all sectors, including state and non-state sectors, and strategic and non-strategic sectors, should have equal rights in issuing shares or bonds. The stock exchanges, instead of the government, should set and enforce eligibility criteria for listing companies.

INVESTMENT EFFICIENCY, SOCIAL WELFARE COSTS, AND PROFITABILITY OF SOES

Empirical Findings

The main reason why the government continues to control the financial system and direct financial resources to loss-making state-owned enterprises is because of its heavy reliance on SOEs to finance and operate the nation's social insurance and welfare system. State-owned enterprises help maintain a high level of employment in urban employment by employing redundant workers, and provide housing, education, health care, and pension funds to urban population. Such a reliance forces the government to continue directing bank loans to loss-making SOEs, thus delaying the financial and state enterprise reform.

The social service burden that SOEs carry have significantly increased their labor costs. *The costs of financing those social activities were able to cover the explicit losses that the loss-making SOEs as a whole has incurred, and three quarters of total losses if implicit financial subsidies from the banking system were included. Separation of social functions from SOEs would significantly improve the profitability of the state enterprise sector.*

SOEs directly providing social services to their employees is also inefficient because it has distracted resources that would have been used in producing commercial output, and it led to inefficient use of services and shortage of supply. Services provided facilities run by SOEs are more

than twice as costly as services provided by alternative means, such as private entities or local governments.

Policy Implications

Social welfare reform is a prerequisite for SOE reform and financial sector reform and should precede these reforms. If SOEs can be relieved of the responsibility of providing social services and supporting redundant personnel, many of the loss-making SOEs will be profitable and they will not need subsidies from the government and state banks, and the task of reforming SOEs would be less formidable as it appears, which in turn will facilitate the reform of the state banking system. Thus, the sequence of the reform should be as follows: social welfare reform, followed by state enterprises restructuring, and then the transformation of the state banking system.

As SOEs' provision of social services is not as efficient as alternative means, such as local governments or other organizations, social service functions should be separated from SOEs and passed on to municipal or local governments or non-government entities. Separating responsibilities for these social functions from SOEs is critical because their continuance, especially housing provided by enterprises, which is among the largest component of the SOEs' social costs, hinders the mobility of workers and managers. As long as social benefits remain linked to jobs, an agile labor market cannot develop, SOEs cannot lay off their redundant personnel, and nonviable SOEs cannot be liquidated. Thus, state banks have to continue injecting soft loans to cover SOEs' losses.

Various reforms for de-linking social services from SOEs establishing a national social welfare system are underway. In the Ninth People's Congress which was held in March 1998, the new government decided to embark on housing reform, stopping welfare housing allocation and requiring employees to purchase or rent residential housing under market prices or rents. Banks have also been encouraged to make more mortgage loans, a type of consumer credit which comprises a large share of banks' assets in Western countries, but is new to Chinese banks. By extending more mortgage loans to urban residents, it is expected that it would facilitate the transition from public-employment housing to private home-ownership. It may also create a new type of assets to banks, and would be able to improve their asset quality. Mortgage loans are also alternative ways of making use of vast amounts of household savings deposits in the banking system. Transferring housing from SOE and public ownership to private ownership would increase family expenditure on housing. In addition, a growing demand for private homes may spur housing construction, which is considered a new source of growth for the Chinese economy, especially when the industrial sectors have enormous excess capacity facing sluggish demand.

The government has also started pilot experiments in some cities to set up a pension plan which requires the enterprises and employees to make contributions. A critical issue is the funding of such a pension. Loss-making SOEs have little funds to contribute to the plan, yet they often have much heavier burdens of supporting retirees than other enterprises. One option suggested by the World bank is to divest housing stock to non-state entities or to individuals and use that income to finance the pension liabilities. Nonetheless, complementary reforms in these areas should also be implemented. It is critical that cross-firm municipal pooling of pension obligations and payroll taxes earmarked for pensions continue to gain importance.¹²⁰

Divestitures of hospitals and other health care facilities of SOEs require setting up a health insurance scheme for employees to cover their health expenditures. The general scheme outlined by the national government combines a unified insurance scheme with individual accounts. It requires enterprises to contribute a sum equal to about 10 percent of employees' wages to a social medical fund, and individuals to pay a smaller share of their earnings into private medical insurance accounts. Expenses for minor illnesses are paid out of the individual accounts; the social fund pays for the major costs of serious ailments.¹²¹ This plan is currently implemented in 50 cities but need to be extended to other cities.

Reducing excess employees and laying off redundant personnel in SOEs require expansion of unemployment insurance. The current national unemployment insurance system only covers the outright unemployed and does not cover the more than 20 million under-employed workers in SOEs. Expanding the program requires substantial increase in funding. This requires increase in individual contributions through payroll taxes, and government funds, as well as other means.

A well-developed financial sector is critical to the growth of the Chinese economy in the long run, but financial sector reform needs to go hand in hand with the SOE reform, which can not proceed forward without SOEs being released of social services responsibilities and establishment of national social welfare system. In light of the problems in the financial sector, state enterprises sector, and social welfare system, the government, led by prime minister Zhu Rongji, has embarked on an ambitious reform program focusing on these three sectors. The government has pledged that it will revitalize the state sector in three years, and build a modern, efficient financial sector in the years ahead. If they are successful, these reforms will be able to bring the Chinese economy into a healthy growth track in the next century.

¹²⁰World Bank (1997).

¹²¹CIA (1997), p. 11.

Appendix

APPENDIX A: STATISTICAL ANNEX

Table A-1

Agriculture Product Market: Market vs. Regulated Prices, 1978-94 (In Percentages)

Year	Fixed Prices	Guided Prices	Market Prices
1978	92.6	1.8	5.6
1979	88.4	4.9	6.7
1980	82.3	9.5	8.2
1981	79.1	11.5	9.4
1982	78.3	11.5	10.2
1983	76.1	13.4	10.5
1984	67.5	14.4	18.1
1985	37.0	23.0	40.0
1986	35.3	21.0	43.7
1987	29.4	16.8	53.8
1988	24.0	19.0	57.0
1989	35.3	24.3	40.0
1990	25.0	23.4	51.6
1991	22.2	20.0	57.8
1992	17.0	15.0	68.0
1993	10.0	2.0	88.0
1994	16.6	4.1	79.9

Source: IMF (1996)

Table A-2

Producer Product Market: Market vs. Regulated Prices, 1990-94 (In Percentages)

Year	Fixed Prices	Guided Prices	Market Prices
1990	44.6	19.0	36.4
1991	36.0	18.3	45.7
1992	20.0	-	80*
1993	15.0	5.0	80.0
1994	14.7	5.3	80.0

Note: * 80 percent in the category of market prices included guided prices.

Source: IMF(1996).

Table A-3
Market vs. Regulated Prices in Retail Sales (In percentages)

Year	Fixed Prices	Guided Prices	Market Prices
1978	97.0	--	3.0
1987	33.7	28.0	38.3
1988	28.9	21.8	49.3
1989	21.3	23.2	45.5
1990	29.7	17.2	53.1
1991	20.9	10.3	68.8
1992	10.0	10.0	80.0
1993	5.0	1.0	94.0
1994	7.2	2.4	90.4

Source: IMF (1996).

Table A-4.

SOURCES OF FUNDS OF FINANCIAL INSTITUTIONS IN CHINA (1996)

Items	Total	State Banks	Other Banks	Urban Credit Co.	Rural Credit Co.	Trust Companies	Finance Companies
Deposits	6857.1	4959.3	289.3	399.8	879.4	247.5	81.8
Deposits by Enterprises	2228.7	1849.7	206.1	148.4			24.6
Deposit by Treasury	127.1	127.1	206.1				81.8
Deposit by Government Departments	94.8	94.8					24.6
Rural and Urban Savings Deposits	3852.1	52.4	49.3	183.3	767.1		
Other Rural Deposits	136.4	23.9	0.2	68.2	112.3		
Other Deposits	418.0	11.5	33.7			247.5	57.2
Bonds	247.7	246.5					
Int'l Borrowing*	29.5	29.5					
Currency in Circulation	880.2	880.2					
Own Capital	392.4	247.6	17.1	15.8	40.1	37.1	7.7
Others	-709.9	-65.5	-112.8	-170.5	-283.0	-52.1	-26.1
Total Funds	7697.1	6324.7	193.6	245.2	636.5	233.7	63.5

Note: 1. Numbers are in billion yuan. 2. * Borrowing from international financial institutions.

Source: PBC (1997a), p. 465.

Table A-5
DIRECTIONS OF USES OF CREDIT FUNDS OF FINANCIAL INSTITUTIONS IN CHINA (1996)

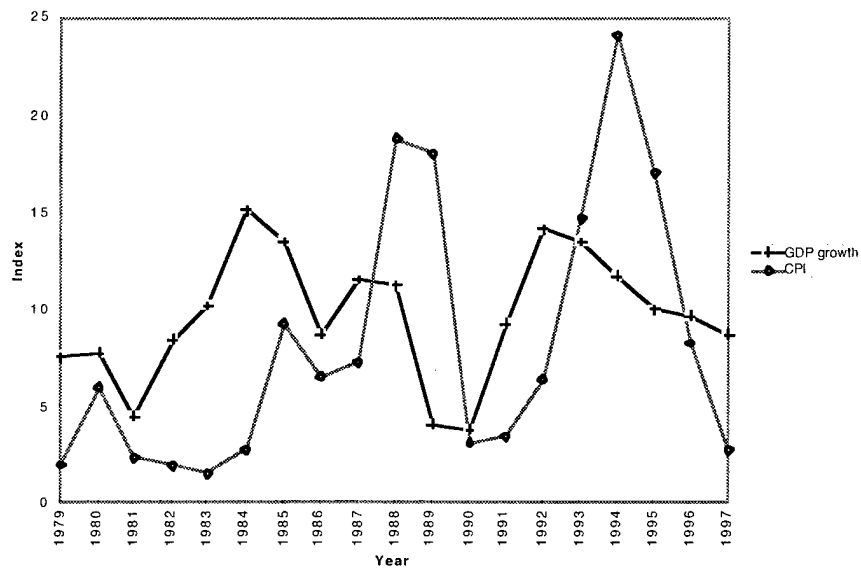
Items	Total	State Banks	Other Banks	Urban Credit Co.	Rural Credit Co.	Trust Companies	Finance Companies
Loans	6115.3	4743.5	193.6	244.5	636.5	233.7	63.5
Productive Enter.	1127.8	1078.2	39.6				
Material Supply Enter.	111.8	1078.2	39.6				
Commercial Enter.	1485.4	1441.7	43.3				
Constructive Enter.	172.0	169.5	2.4				
Urban Col. Enter.	263.9	112.0		143.9			
Individual Enter.	28.0	5.4	1.3	21.3			
Agriculture and TVEs	712.3	236.8	0.4		475.1		
Fixed Assets	1215.4	1203.4	10.3				1.6
Foreign-Inv. Enter.	134.6	121.7	12.9				
Other	864.1	254.9	83.3	79.4	161.3	233.7	51.5
Bond Purchase	410.4	409.8		0.6			
Gold	1.2	1.2					
Foreign Exchange	957.9	957.9					
Assets in int'l fin. inst.	54.1	54.1					
Claims on Govt.	158.2	158.2					
Total	7697.1	6324.7	193.6	245.2	636.5	233.7	63.5

Source: PBC (1997a), p. 465.

Appendix

APPENDIX B: CHINA'S ECONOMIC CIRCLE: ECONOMIC GROWTH AND INFLATION

Figure B-1. China's Economic Cycle: Inflation and GDP Growth, 1979-97



Source: China Statistical Yearbook, 1997; People's Daily, March 7.

APPENDIX C: SOCIAL SERVICES FUNCTIONS OF SOES: A CASE STUDY

This enterprise is a steel-making SOE in Southwest China. Information is gathered by a World Bank Mission to China.¹²²

Education

The enterprise owns and operates the schooling system for the children of its employees from age 6 months to 18 months. Its kindergarten serves 250 children from age 6 months to 6 years, and has a total of 41 teachers. Parents who are employees of the enterprise pay a nominal fee of 20 yuan a month. The elementary school was established in 1972 and today serves 356 students between the ages of 7 and 12. Most of the students are employees' children for whom schooling is free. All costs are borne by the factory, including the costs of 34 teachers. The middle school serves children 12 to 18 years, has 395 students and 49 teachers. High school students pay a fee of 80 yuan per semester. Except for books, which are purchased by the parents, other materials, supplies, and operating costs are covered by the enterprise.

Health care

Since 1969, the enterprise has owned and operated a hospital for employees and their families. The hospital has a 60-bed capacity and treats an average of 50 people a day on a walk-in basis. It has a staff of 76, of which 2 are physicians and 24 are nurses. There are three other hospitals in the area, one of which is run by the district government. Factory employees depend primarily on the enterprise hospital for their health care as the enterprise subsidizes 85 percent of the costs of health costs and medicines; retirees' fees are 90 percent subsidized.

Housing

Ninety-five percent of the housing for workers and their families is provided by the enterprise at a highly subsidized rates. There are three types of co-financing arrangements. The first option is for an employee to pay a monthly rent to the enterprise. The second option is a joint purchasing arrangement between the employee and the enterprise in which the former receives limited property rights. Employees also have the option of buying their apartments outright from the enterprise. Tenants are required to pay for their own water, electricity, and heating costs, but these rates are subsidized by the enterprise. Retired employees can remain indefinitely in enter-

¹²²World Bank (1997), p. 75. The identity of the SOE was not provided in the World Bank report.

prise housing. To this end, the enterprise builds or procures additional housing almost yearly to ensure adequate supply.

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